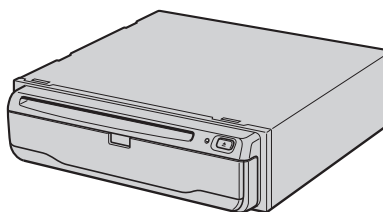


Service Manual

Pioneer



ORDER NO.
CRT2708

DVD NAVIGATION UNIT

AVIC-8DVD

EW



● This service manual should be used together with the following manual(s):

Model No.	Order No.	Mech. Module	Remarks
CX-954	CRT2670	MS2	DVD Mech. Module:Circuit Description, Mech.Description, Disassembly

● This product has the unit part numbers as below.

Unit Part No.	Description
CPN1745	Main Assy

*) The unit part numbers listed above are not for the service components.

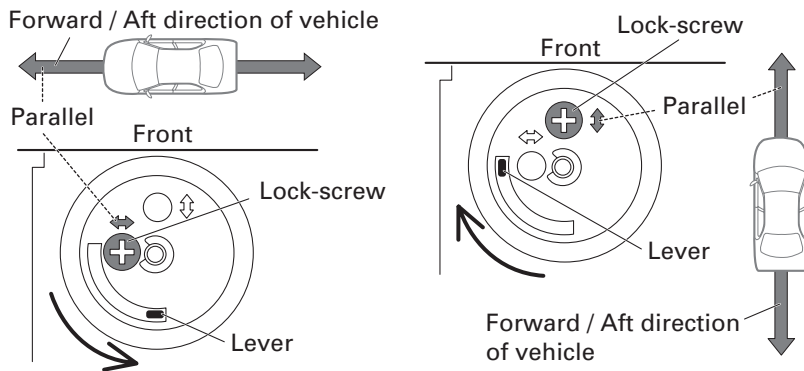
● For your inspection, the following extention cords are supplied. Use them if necessary.

part to use	Part No.
Main PCB (CN3251) <--> DVD Core Unit R (CN1701)	GGD1170
Main PCB (CN3254) <--> CC Unit (CN302)	GGD1264
Main PCB (CN3901) <--> Interface PCB (CN5004)	GGD1171
Main PCB (CN552) <--> GPS Unit (CN461)	GGD1265
CC Unit (CN2) <--> DVD Core Unit R (CN1401)	GGD1268

PIONEER CORPORATION 4-1, Meguro 1-Chome, Meguro-ku, Tokyo 153-8654, Japan
PIONEER ELECTRONICS SERVICE INC. P.O.Box 1760, Long Beach, CA 90801-1760 U.S.A.
PIONEER EUROPE NV Haven 1087 Keetberglaan 1, 9120 Melsele, Belgium
PIONEER ELECTRONICS ASIACENTRE PTE.LTD. 253 Alexandra Road, #04-01, Singapore 159936

● DVD Player Service Precautions

1. Never adjust the LD VR in the pickup unit to protect the pickup from electrical damages.
 2. For pickup unit(service)(CXX1530) handling, please refer to "Disassembly"(see page 143).
During replacement, handling precautions shall be taken to prevent an electrostatic discharge(set the short switch of the pickup unit to the SHORT side).
 3. During disassembly, be sure to turn the power off since an internal IC might be destroyed when a connector is plugged or unplugged.
 4. Please adjusting the skew after changing the pickup unit(see page 118).
- High voltage is generated in the inverter when the power is supplied to the system. To avoid an electric shock, reconfirm that the power switch is set to OFF before starting operation.
 - Check of installation direction when G-Sensor Unit was after repair.



CONTENTS

1. SAFETY INFORMATION	2	7. GENERAL INFORMATION	120
2. EXPLODED VIEWS AND PARTS LIST	6	7.1 DIAGNOSIS	120
3. BLOCK DIAGRAM AND SCHEMATIC DIAGRAM ...	12	7.1.1 TEST MODE	120
4. PCB CONNECTION DIAGRAM	82	7.1.2 USING THE TEST MODE	136
5. ELECTRICAL PARTS LIST	98	7.1.3 DISASSEMBLY	143
6. ADJUSTMENT	114	7.1.4 CONNECTOR FUNCTION DESCRIPTION	146
		7.2 IC	147
		7.3 EXPLANATION	166
		7.3.1 CIRCUIT DESCRIPTION	166
		7.3.2 OPERATIONAL FLOW CHART	167
		8. OPERATIONS AND SPECIFICATIONS.....	168

1. SAFETY INFORMATION

CAUTION

This service manual is intended for qualified service technicians; it is not meant for the casual do-it-yourselfer. Qualified technicians have the necessary test equipment and tools, and have been trained to properly and safely repair complex products such as those covered by this manual. Improperly performed repairs can adversely affect the safety and reliability of the product and may void the warranty. If you are not qualified to perform the repair of this product properly and safely, you should not risk trying to do so and refer the repair to a qualified service technician.

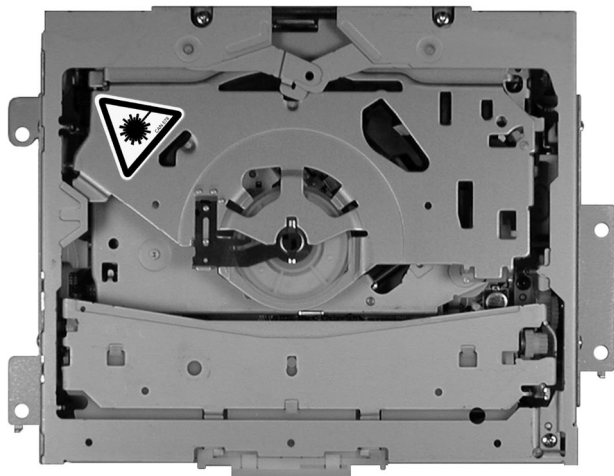
1. Safety Precautions for those who Service this Unit.

- Follow the adjustment steps (see pages 115 through 119)in the service manual when servicing this unit. When checking or adjusting the emitting power of the laser diode exercise caution in order to get safe, reliable results.

Caution:

1. During repair or tests, minimum distance of 13cm from the focus lens must be kept.
2. During repair or tests, do not view laser beam for 10 seconds or longer.

2. The triangular label is attached to the mechanism unit frame.



CAUTION

This product contains a laser diode of higher class than 1. To ensure continued safety, do not remove any covers or attempt to gain access to the inside of the product. Refer all servicing to qualified personnel.

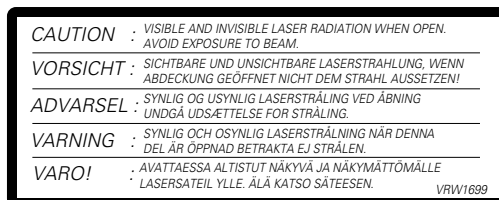
The following caution label appears on your unit.

Location: on the bottom of the unit



En

On the bottom of the player.



WARNING!

The AEL (accessible emission level) of the laser power output is less than CLASS 1 but the laser component is capable of emitting radiation exceeding the limit for CLASS 1.

A specially instructed person should do servicing operation of the apparatus.

Laser diode characteristics

Wave length:

DVD:640~660nm

CD:770~810nm

Maximum output:2.44mw(Emitting period :9sec.)

DVD:743mw(Emitting period : unlimited)

Additionla Laser Caution

Transistors Q1104 and Q1108 in PCB drive the laser diodes for DVD and CD respectively. When Q1104 or Q1108 is shorted between their terminals, the laser diodes for DVD or CD will radiate beam. If the top cover is removed with no disc loaded while such short-circuit is continued, the naked eyes may be exposed to the laser beam.

WARNING!

Lithium batteries. Danger of explosion. Replacement must be done by qualified personnel and only by following the instructions given in the service manual.

This warning is stated on the product or in the operating instructions. When replacing the lithium batteries, follow the note below.

Dispose of the used battery promptly. Keep away from children. Do not disassemble and do not dispose of in fire.

The battery used in this device may present a fire or chemical hazard if mistreated. Do not recharge, disassemble, heat above 100°C or incinerate. Replace only with the same Part Number. Use of another battery may present a risk of fire or explosion.

Note: The lithium battery installation position is shown in the exploded view and the P.C. board pattern.

ADVARSEL!

Lithiumbatteri — Eksplosionsfare ved fejlagtig håndtering. Udskiftning må kun ske med batteri af samme fabrikat og type. Levér det brugte batteri tilbage til leverandøren.

Denne advarsel er angivet på produktet eller i brugsvejledningen. Ved udskiftning af lithium batterierne følges nedenstående anvisning.

Batterierne må kun udskiftes med batterier af samme type og mærke.

VARNING

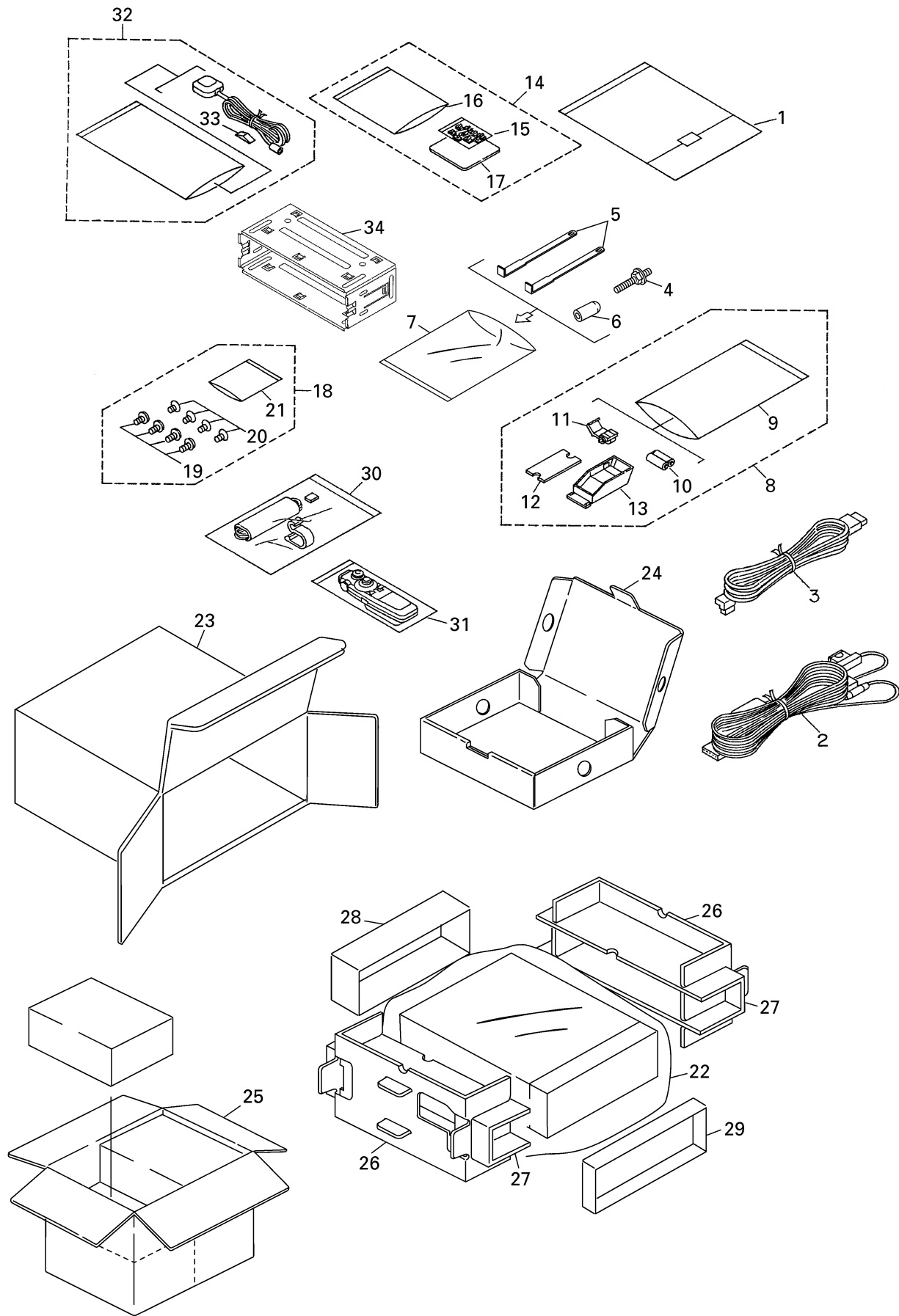
Explosionsfara vid felaktigt batteribyte. Använd samma batterityp eller en ekvivalent typ som rekommenderas av apparattillverkaren. Kassera använt batteri enligt fabrikantens instruktion.

Denna varning finns på apparaten eller i bruksanvisningen. Följ nedanstående anvisningar vid byte av litiumbatterier.

Batterierna får endast bytas ut mot litiumbatterier av samma typ och fabrikat.

2. EXPLODED VIEWS AND PARTS LIST

2.1 PACKING



NOTE:

- Parts marked by “*” are generally unavailable because they are not in our Master Spare Parts List.
- Screws adjacent to ∇ mark on the product are used for disassembly.

● PACKING SECTION PARTS LIST

Mark	No.	Description	Part No.	Mark	No.	Description	Part No.
	1-1	Owner's Manual	CRD3461		16	Polyethylene Bag	CEG1161
	1-2	Installation Manual	CRD3456		17	Sheet	CNM6902
	1-3	Owner's Manual/PEE/ENG	CRB1678		18	Screw Assy	CEA2896
	1-4	Owner's Manual/PEE/SPE	CRB1679		19	Screw	BMZ50P060FZK
	1-5	Owner's Manual/PEE/GER	CRB1680		20	Screw	CMZ50P060FMC
	1-6	Owner's Manual/PEE/FRE	CRB1681				
	1-7	Owner's Manual/PEE/ITA	CRB1682				
	1-8	Owner's Manual/PEE/DUT	CRB1683				
*	1-9	Warranty Card	CRY1157	*	21	Polyethylene Sheet	CNM4338
	1-10	Passport	CRY1013		22	Polyethylene Bag	CEG-162
					23	Carton	CHG4390
					24	Sub Carton	CHG4392
					25	Contain Box	CHL4390
*	1-11	Polyethylene Bag	E36-634		26	Protector	CHP2383
	2	Cord Assy	CDE6678		27	Protector	CHP2384
	3	Cord Assy	CDE6659		28	Protector	CHP2386
	4	Screw	CBA1002		29	Protector	CHP2387
	5	Handle	CNC5395		30	Microphone Assy	CPM1048
	6	Bush	CNV3930		31	Remote Control Assy	CXB7427
*	7	Polyethylene Bag	E36-615		32	GPS Antenna Assy	CXB7600
	8	Accessory Assy	CEA2536		33	Water Proof Pad	CZN5352
	9	Polyethylene Bag	CEG1011		34	Holder	CNC8659
	10	Battery	CEX1021				
	11	Connector	CKX1049				
	12	Sheet	CNM6370				
	13	Holder	CNS5606				
	14	Accessory Assy	CEA2643				
	15	Cord Clamper Assy	CEA2644				

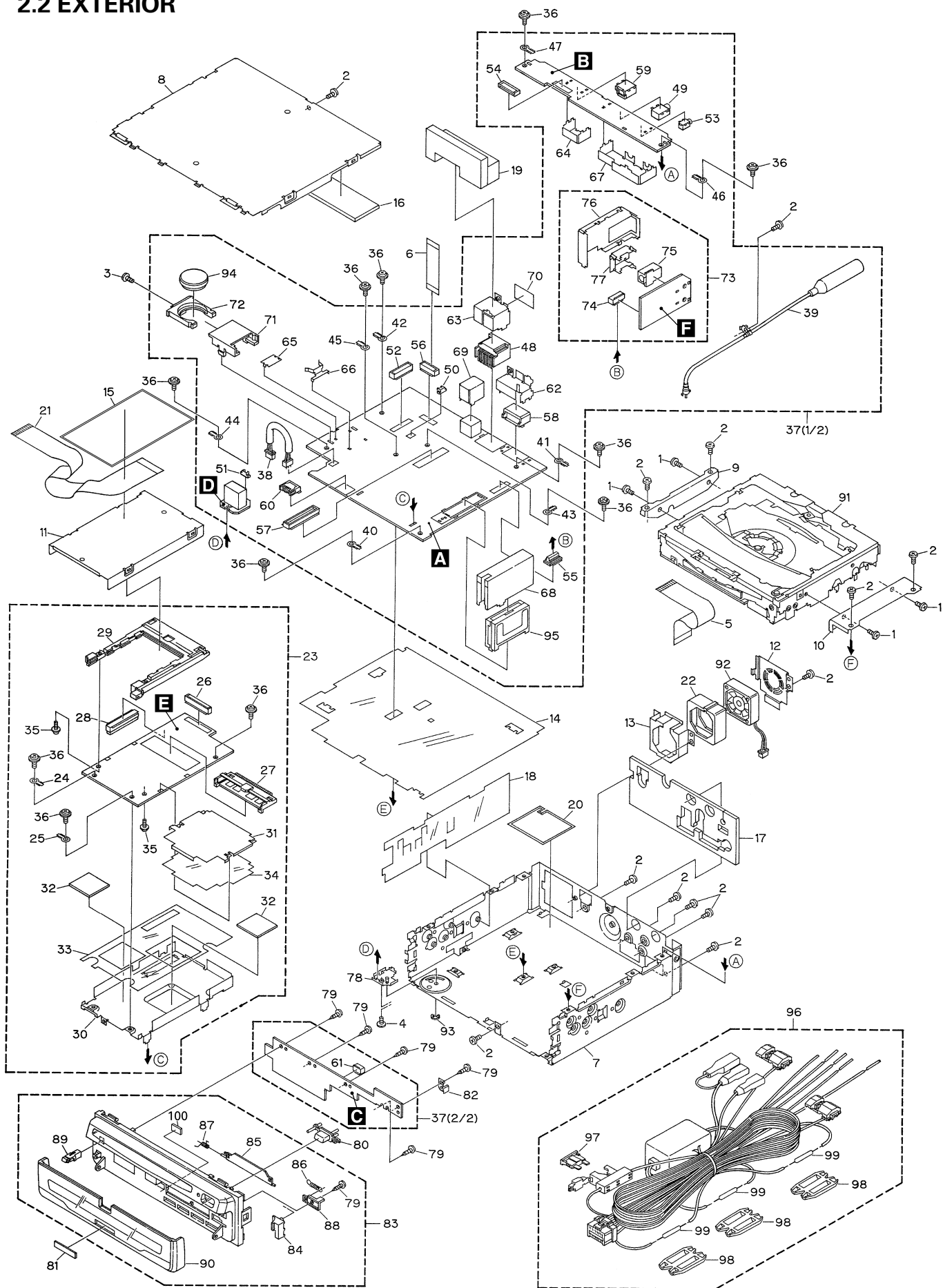
● Owner's Manual

Part No.	Language
CRD3461	English, Spanish, German, French, Italian, Dutch
CRB1678	English
CRB1679	Spanish
CRB1680	German
CRB1681	French
CRB1682	Italian
CRB1683	Dutch

● Installation Manual

Part No.	Language
CRD3456	English, Spanish, German, French, Italian, Dutch

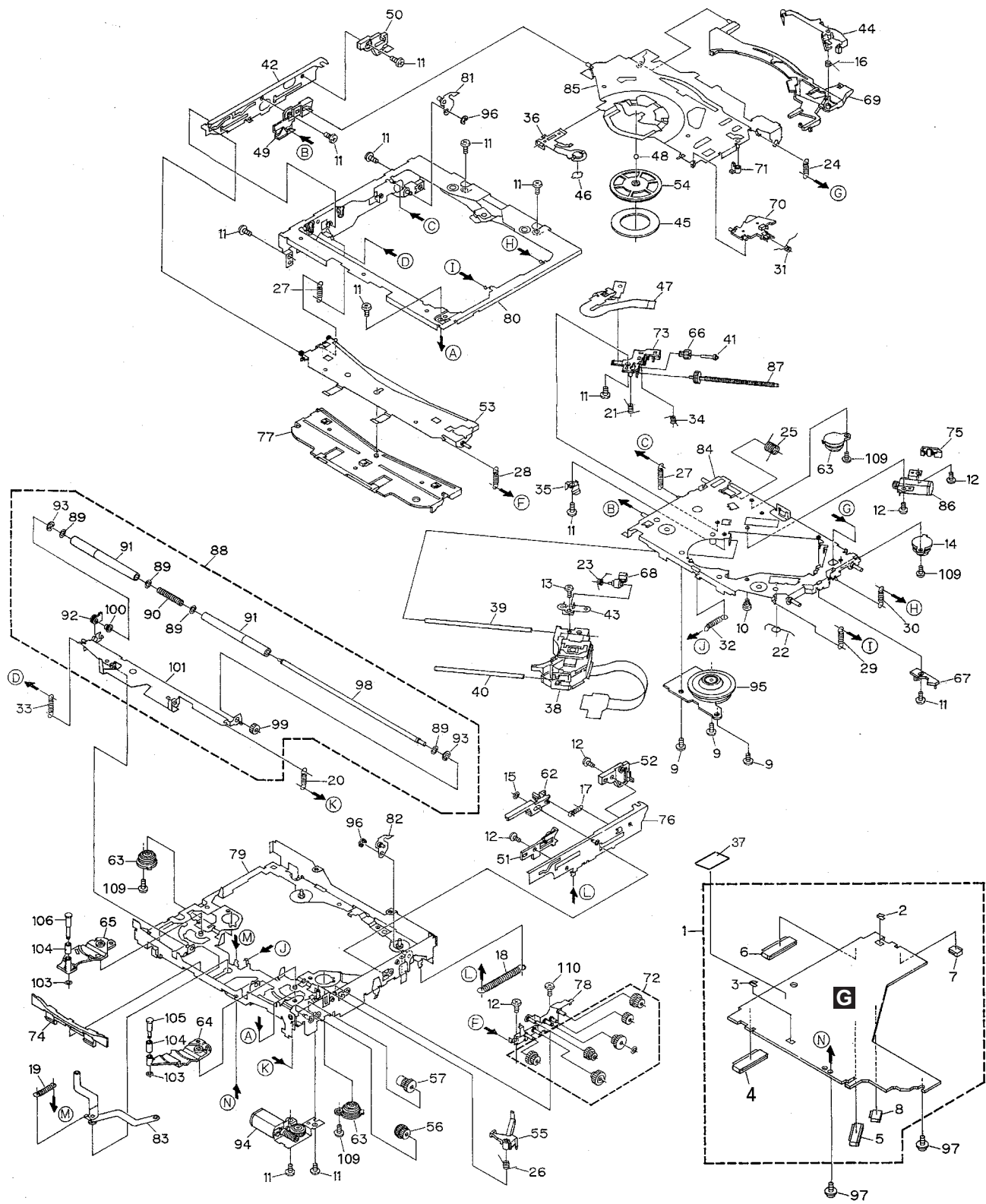
2.2 EXTERIOR



● EXTERIOR SECTION PARTS LIST

Mark No.	Description	Part No.	Mark No.	Description	Part No.
1	Screw	BMZ20P025FMC	51	Connector(CN556)	CKS3125
2	Screw	BMZ26P040FMC	52	Connector(CN3251)	CKS3751
3	Screw(M2.6x4)	CBA1013	53	Connector(CN5001)	CKS3759
4	Screw(M3x3)	CBA1534	54	Connector(CN5004)	CKS3991
5	FFC	CDE6529	55	Connector(CN552)	CKS4065
6	FFC	CDE6530	56	Connector(CN3901)	CKS4361
7	Chassis	CNA2429	57	Connector(CN3254)	CKS4430
8	Case	CNB2712	58	Connector(CN3257)	CKS4463
9	Bracket	CNC9280	59	Connector(CN5002)	CKS4473
10	Bracket	CNC9281	60	Connector(CN660)	CKS4518
11	Shield	CNC9643	61	Connector(CN2851)	CKS4519
12	Holder	CNC9719	62	Holder	CNC9270
13	Holder	CNC9720	63	Holder	CNC9271
14	Insulator	CNM7186	64	Holder	CNC9272
15	Insulator	CNM7597	65	Holder	CNC9474
16	Cushion	CNM7442	66	Holder	CNC9475
17	Cushion	CNM7459	67	Holder	CNC9477
18	Insulator	CNM7460	68	Shield	CNC9533
19	Cushion	CNM7461	69	Shield	CNC9635
20	Insulator	CNM7506	70	Insulator	CNM7535
21	PCB	CNP6231	71	Holder	CNV6763
22	Cover	CNV6912	72	Holder	CNV6764
23	CC Unit	CWM7628	73	GPS Unit	CWX2590
24	Terminal(CN99)	CKF1064	74	Connector(CN461)	CKS4280
25	Terminal(CN100)	CKF1064	75	Connector(CN504)	CKS4432
26	Connector(CN2)	CKS3930	76	Shield	CNC9191
27	Connector(CN901)	CKS4070	77	Holder	CNC9252
28	Connector(CN302)	CKS4429	78	Holder Unit	CXB7069
29	Connector	CKS4434	79	Screw	BPZ20P050FMC
30	Shield	CNC9267	80	Button(EJECT)	CAC7005
31	Shield	CNC9485	* 81	Badge	CAH1754
32	Sheet	CNM6903	82	Earth Plate	CNC9476
33	Insulator	CNM7456	83	Grille Unit	CXB8289
34	Insulator	CNM7532	84	Button(PC-CARD)	CAC7105
35	Screw	IMS20P060FCR	85	Door	CAT2285
36	Screw	IMS26P030FMC	86	Spring	CBH2258
37	Main Unit	CWM7680	87	Spring	CBH2499
38	Cord Assy(CN555)	CDE5955	88	Holder	CNV6794
39	Antenna Cable(CN551)	CDH1304	89	Latch Unit	CXB3967
40	Terminal(CN553)	CKF1064	90	Door Unit	CXB7569
41	Terminal(CN554)	CKF1064	91	DVD Mechanism Module(MS2)	CXK6121
42	Terminal(CN1803)	CKF1064	92	Fan Motor	CXM1192
43	Terminal(CN3258)	CKF1064	93	Washer	YE20FUC
44	Terminal(CN3259)	CKF1064	* 94	Battery	CEX1068
45	Terminal(CN3903)	CKF1064	95	Tuner Unit(FE551)	CWE1622
46	Terminal(CN5006)	CKF1064	96	Cord Assy	CDE6678
47	Terminal(CN5007)	CKF1064	97	Fuse(7.5A)	CEK1135
48	Connector(CN1801)	CKM1341	98	Cap	CNS1472
49	Jack(CN5005)	CKN1035	99	Resistor	RS1/2PMF102J
50	Connector(CN1802)	CKS3124	100	Sheet	CNM7595

2.3 DVD MECHANISM MODULE

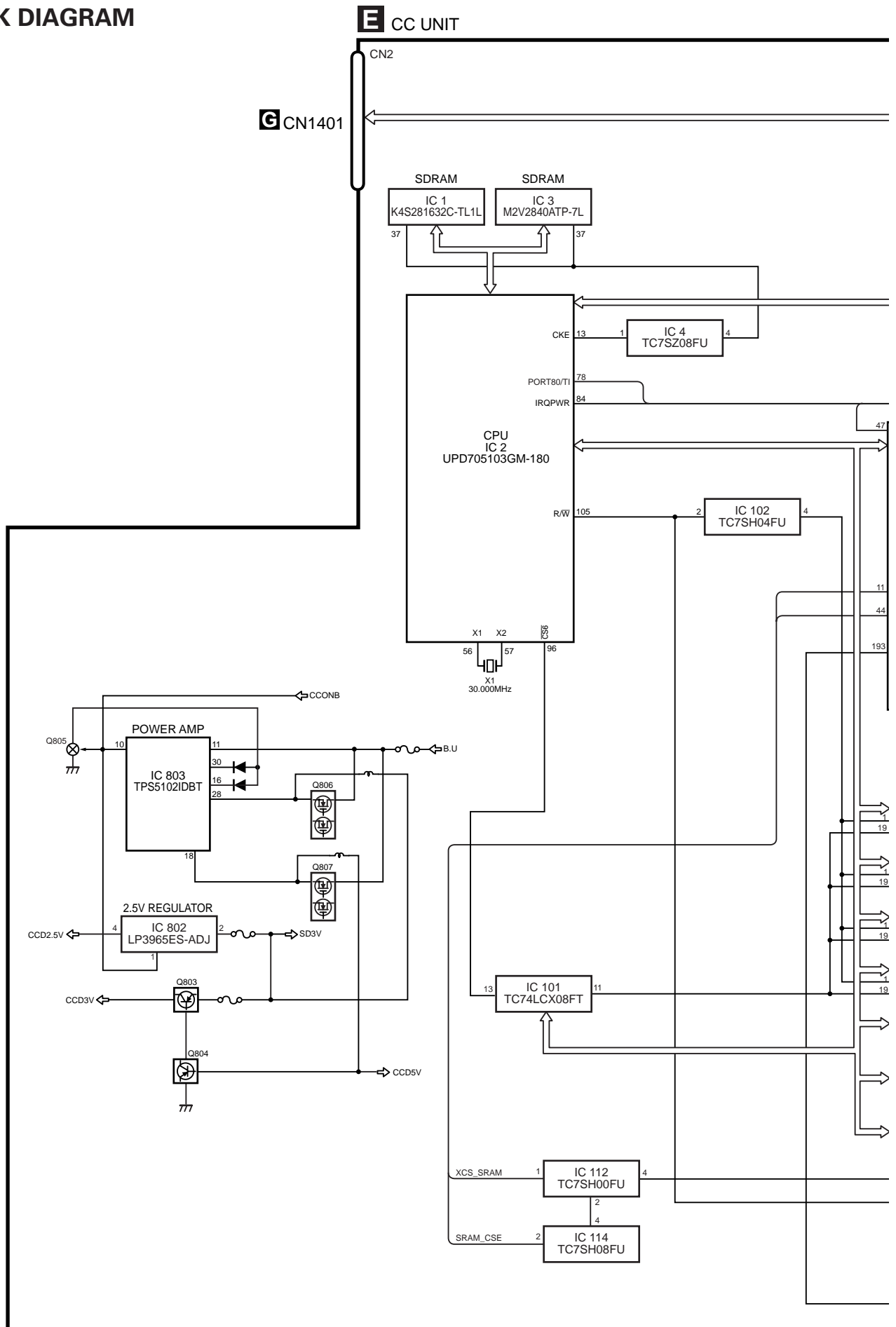


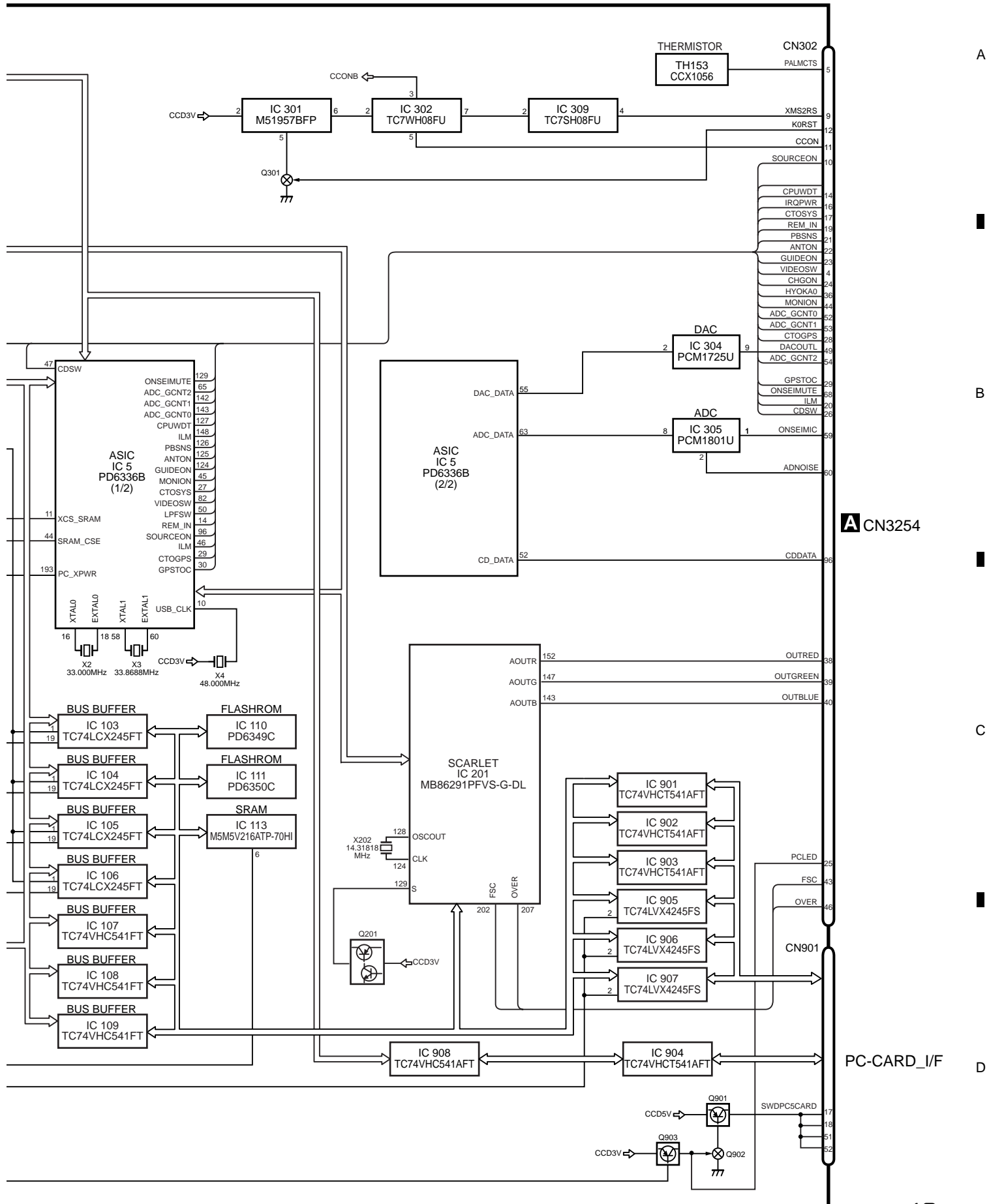
● DVD MECHANISM MODULE SECTION PARTS LIST

Mark No.	Description	Part No.	Mark No.	Description	Part No.
1	DVD Core Unit R	CWX2576	56	Gear	CNV6361
2	Terminal(CN1703)	CKF1065	57	Gear	CNV6362
3	Terminal(CN1705)	CKF1065	58-61	
4	Connector(CN1401)	CKS4052	62	Rack	CNV6367
5	Connector(CN1100)	CKS3749	63	Damper	CNV6368
6	Connector(CN1701)	CKS4052	64	Arm	CNV6369
7	Connector(CN1700)	CKS4374	65	Arm	CNV6370
8	Connector(CN1300)	CKS4507	66	Gear	CNV6372
9	Screw(M2x3)	CBA1486	67	Holder	CNV6374
10	Screw	CBA1535	68	Rack	CNV6376
11	Screw(M2x2.2)	CBA1547	69	Arm	CNV6377
12	Screw(M2x2.2)	CBA1548	70	Arm	CNV6378
13	Screw(M1.4x2)	CBA1549	71	Arm	CNV6379
14	Damper	CNV6927	72	Gear Unit	CXB5959
15	Washer	CBF1038	73	Holder	CNV6383
16	Spring	CBH2394	74	Guide	CNV6384
17	Spring	CBH2395	75	Holder	CNV6385
18	Spring	CBH2396	76	Lever Unit	CXB5943
19	Spring	CBH2397	77	Holder Unit	CXB5944
20	Spring	CBH2398	* 78	Holder Unit	CXB5947
21	Spring	CBH2399	79	Frame Unit	CXB5948
22	Spring	CBH2400	80	Frame Unit	CXB5949
23	Spring	CBH2401	81	Arm Unit	CXB5950
24	Spring	CBH2402	82	Arm Unit	CXB5951
25	Spring	CBH2403	83	Arm Unit	CXB5952
26	Spring	CBH2404	84	Chassis Unit	CXB5953
27	Spring	CBH2405	85	Arm Unit	CXB5954
28	Spring	CBH2406	86	Motor Unit(CRG)	CXB5955
29	Spring	CBH2407	87	Screw Unit	CXB5957
30	Spring	CBH2408	88	Roller Unit	CXB5958
31	Spring	CBH2410	89	Washer	CBF1060
32	Spring	CBH2411	90	Spring	CBH2170
33	Spring	CBH2413	91	Roller	CNV6068
34	Spring	CBH2414	92	Holder	CNV6210
35	Spring	CBL1499	93	Washer	YE20FUC
36	Spring	CBL1500	94	Motor Unit(LOAD)	CXB5960
37	Sheet	CNM7590	95	Motor Unit(SPDL)	CXB6218
38	Pickup Unit(Service)(DP4)	CXX1530	96	Washer	YE15FUC
39	Shaft	CLA3878	97	Screw	IMS20P030FMC
40	Shaft	CLA3879	* 98	Shaft	CLA3877
41	Shaft	CLA3881	* 99	Gear	CNV6359
42	Lever	CNC8988	* 100	Caller	CNV6382
43	Bracket	CNC8992	* 101	Arm Unit	CXB5945
44	Arm	CNC8994	102	
45	Sheet	CNM6883	103	Washer	CBF1087
46	Sheet	CNM6884	104	Roller	CNV6928
47	PCB	CNP5971	105	Shaft	CLA4091
48	Ball	CNR1189	106	Shaft	CLA4092
49	Guide	CNV6352	107,108	
50	Guide	CNV6353	109	Screw (M2x3.5)	CBA1560
51	Guide	CNV6354	110	Screw (M2x2.2)	CBA1419
52	Guide	CNV6355			
53	Guide	CNV6356			
54	Clamper	CNV6357			
55	Arm	CNV6358			

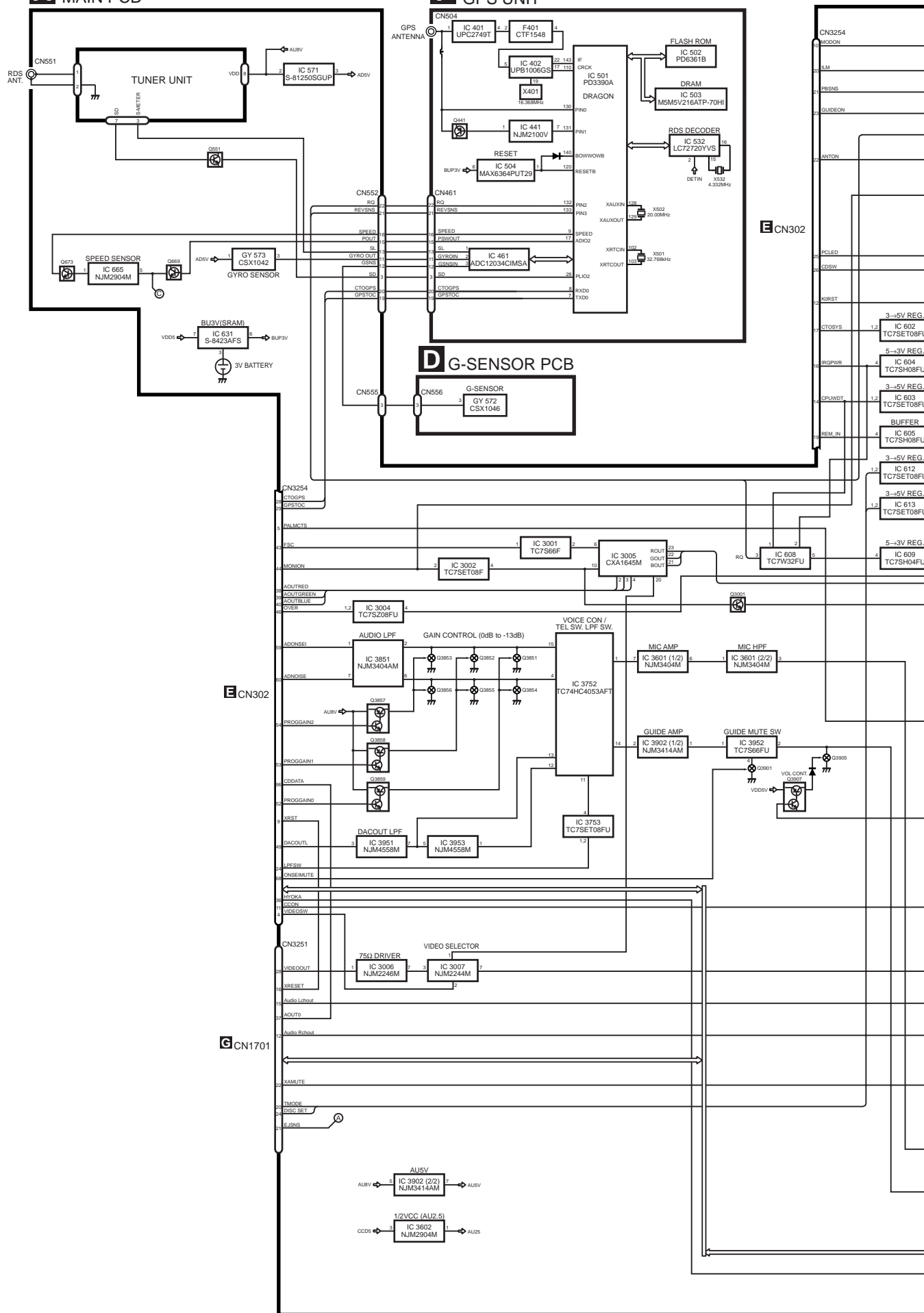
3. BLOCK DIAGRAM AND SCHEMATIC DIAGRAM

3.1 BLOCK DIAGRAM





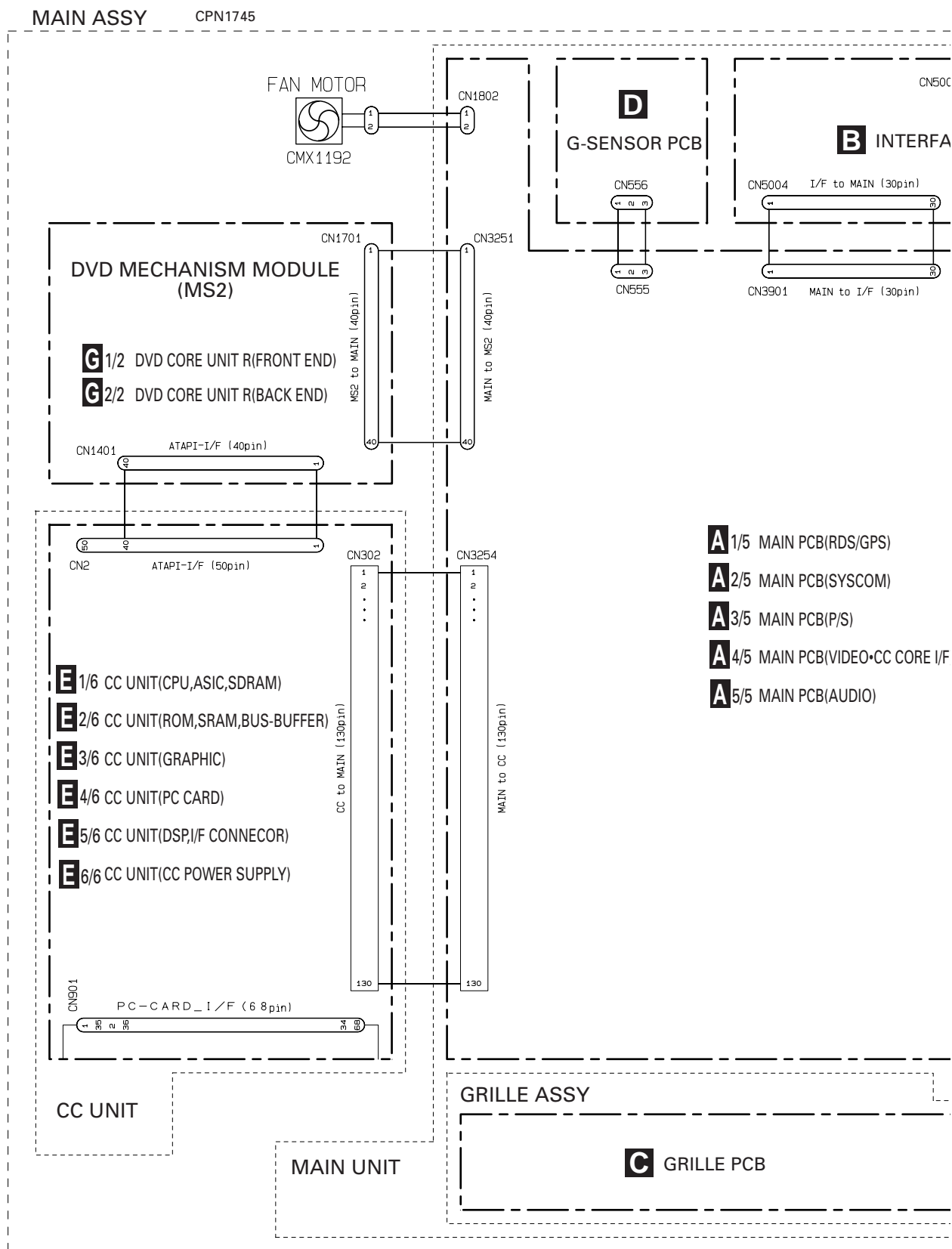
GCN1701

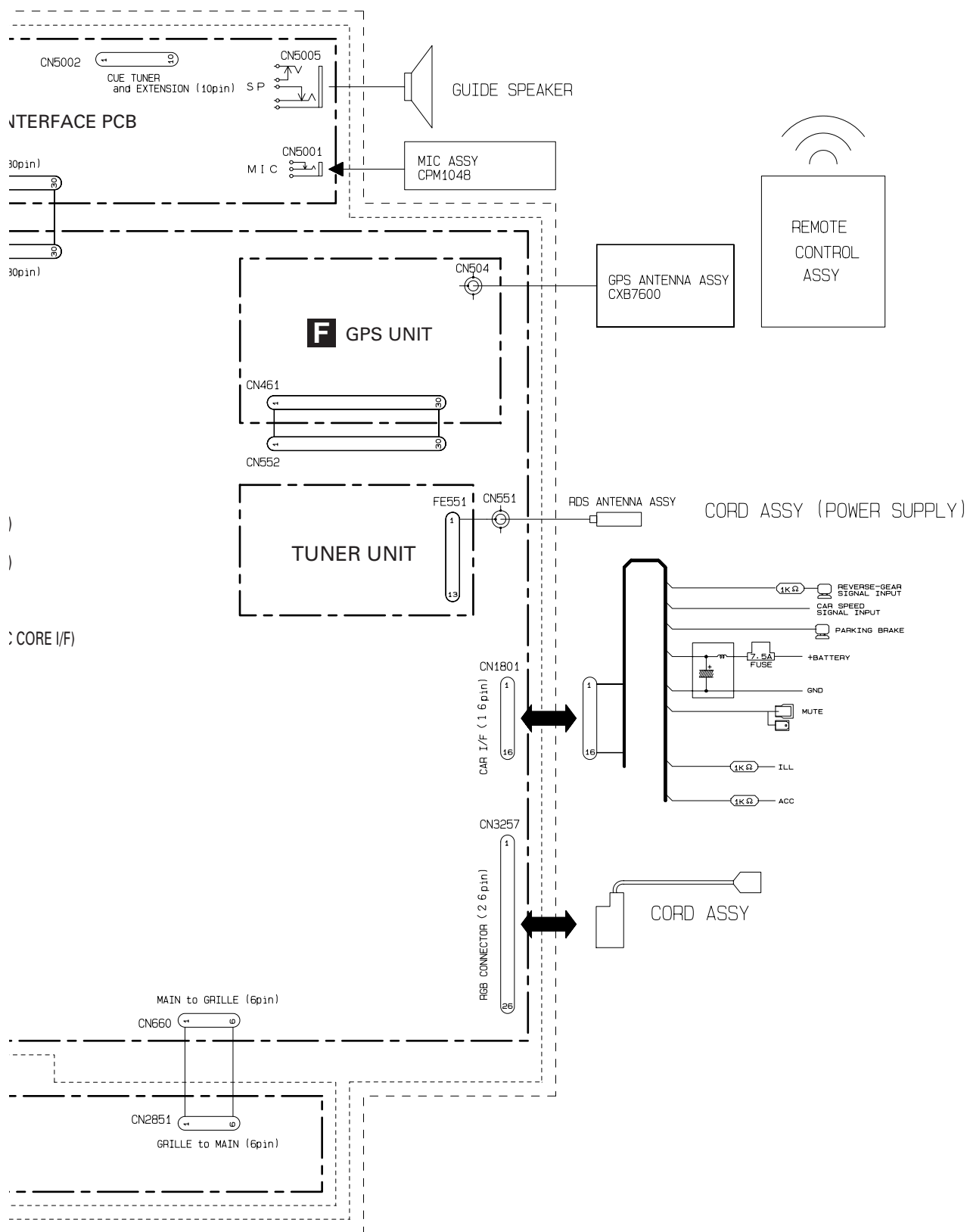




3.2 OVERALL CONNECTION DIAGRAM

Note: When ordering service parts, be sure to refer to “EXPLODED VIEWS AND PARTS LIST” or “ELECTRICAL PARTS LIST”.






A

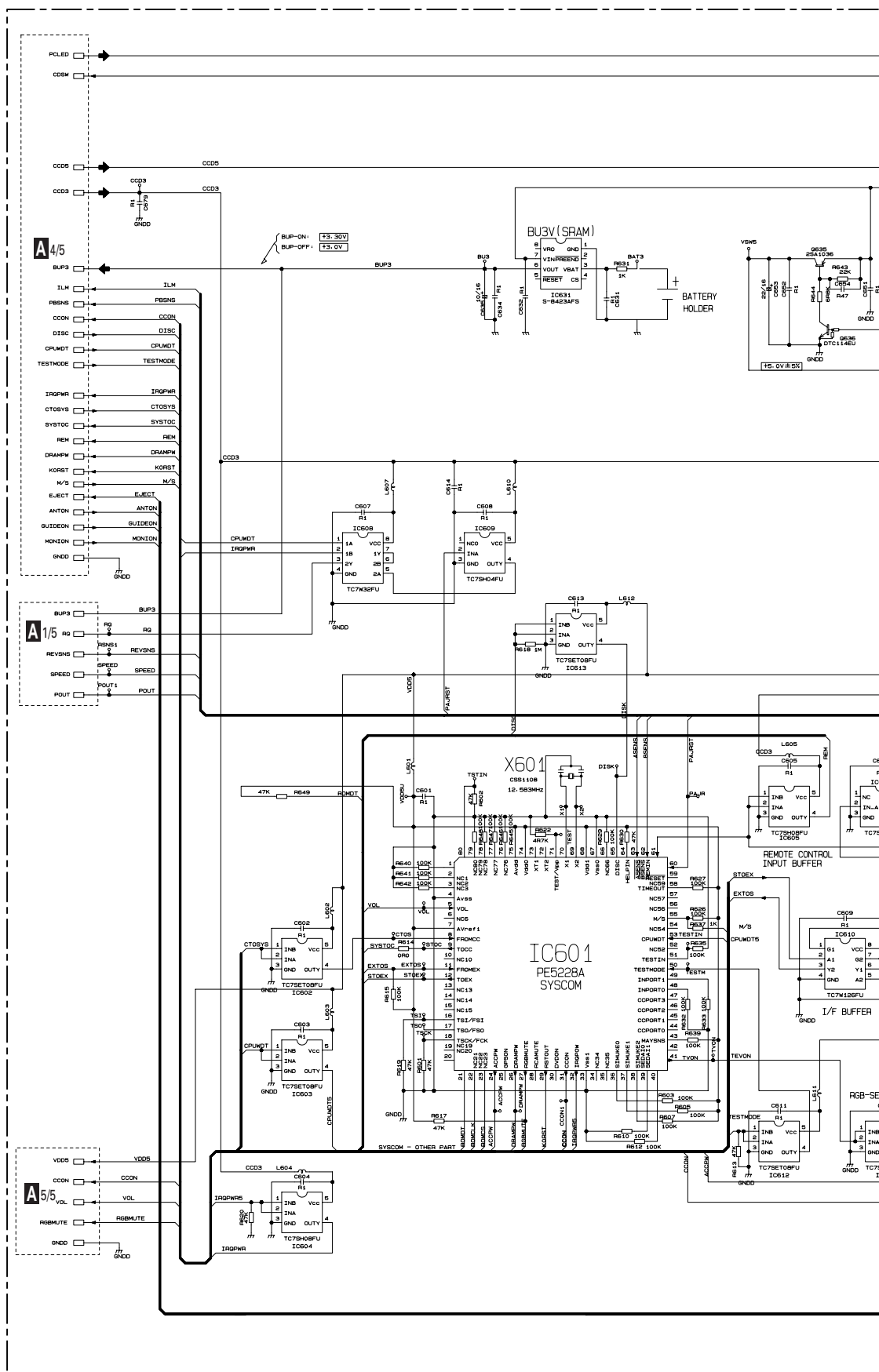
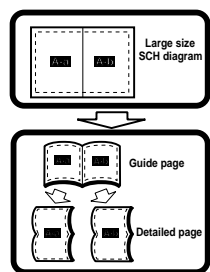
B



D

- The  mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.





A



C

D

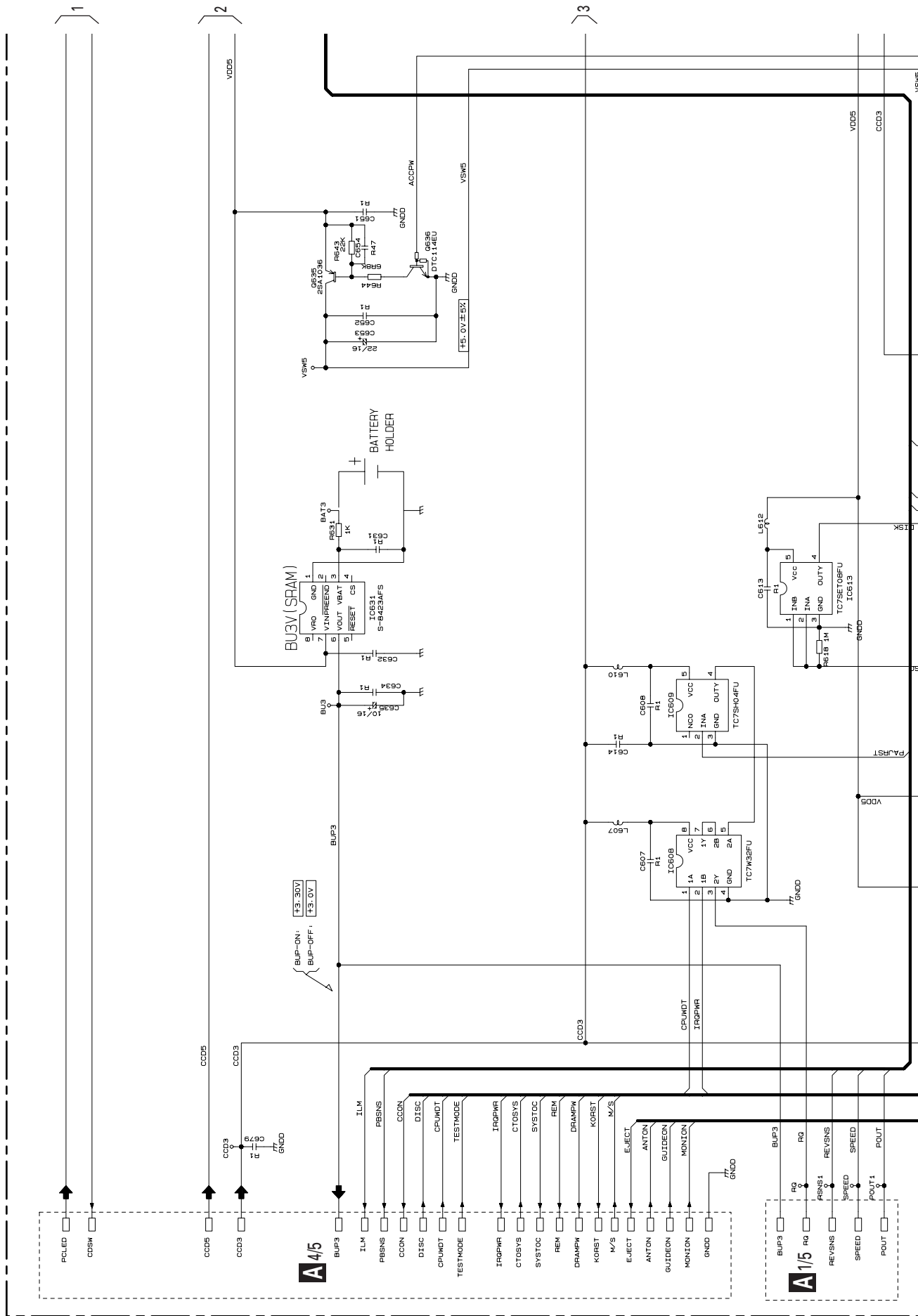
A-a A-b

A

B

C

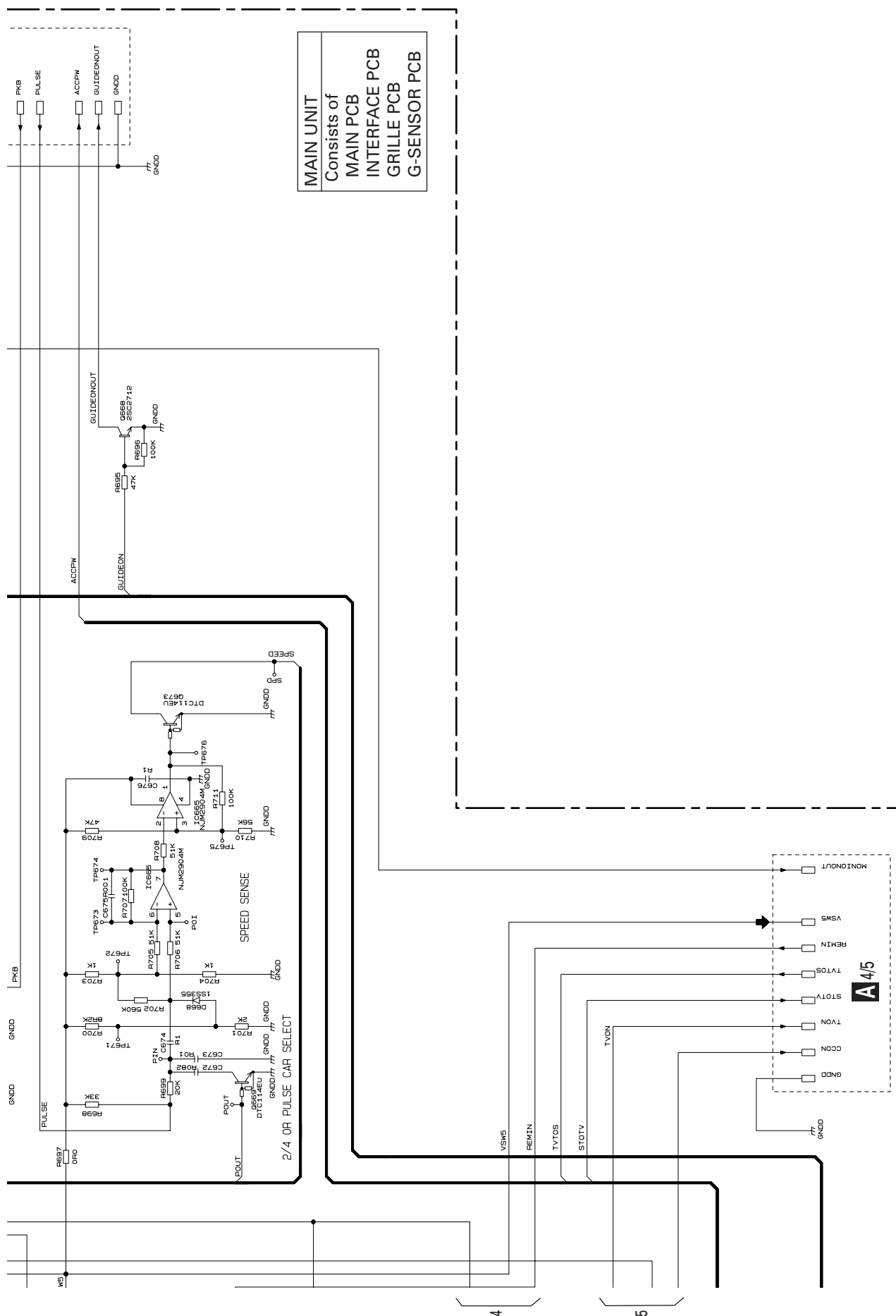
D





A-a A-b

C



A-a A-b

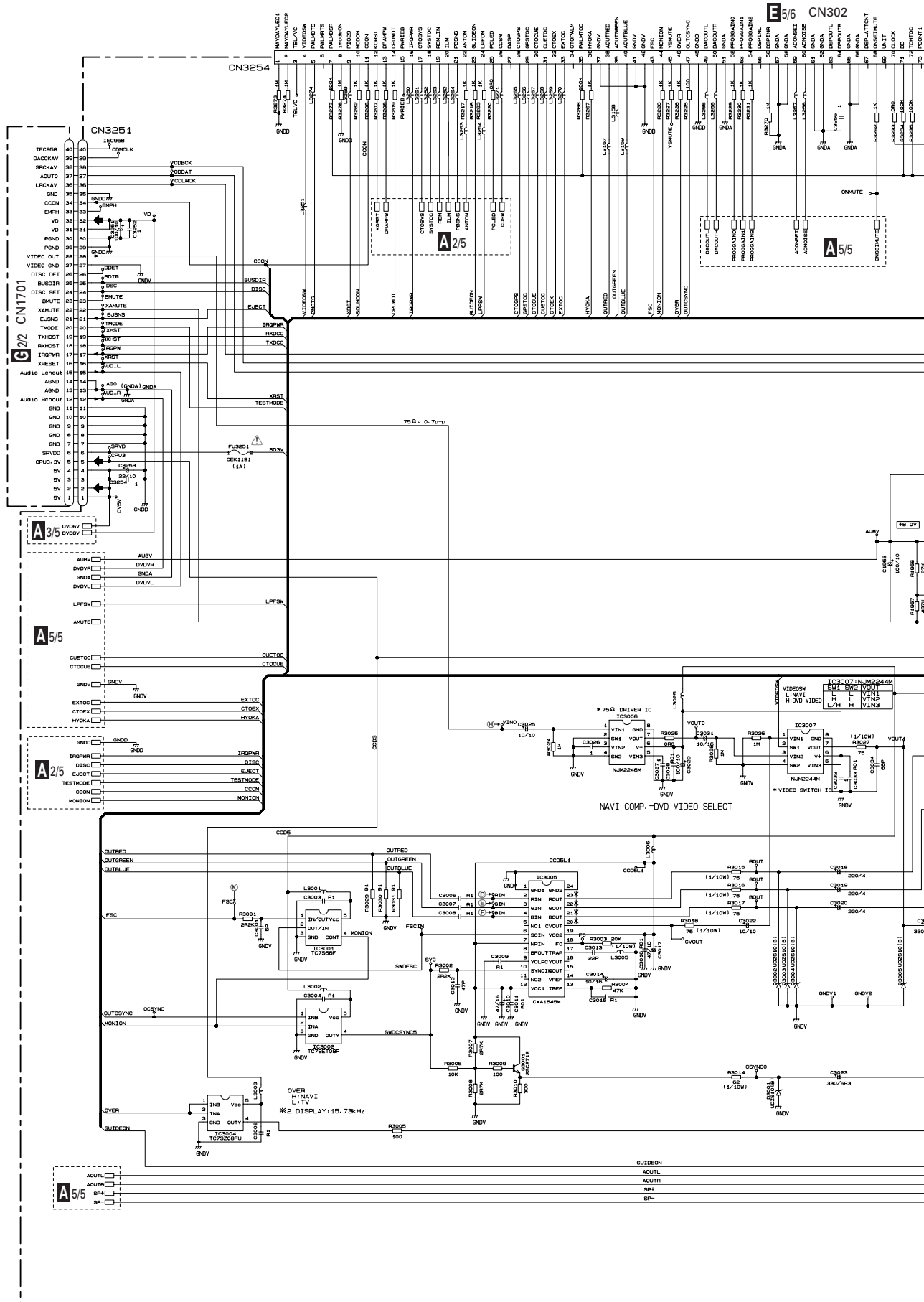
A

B

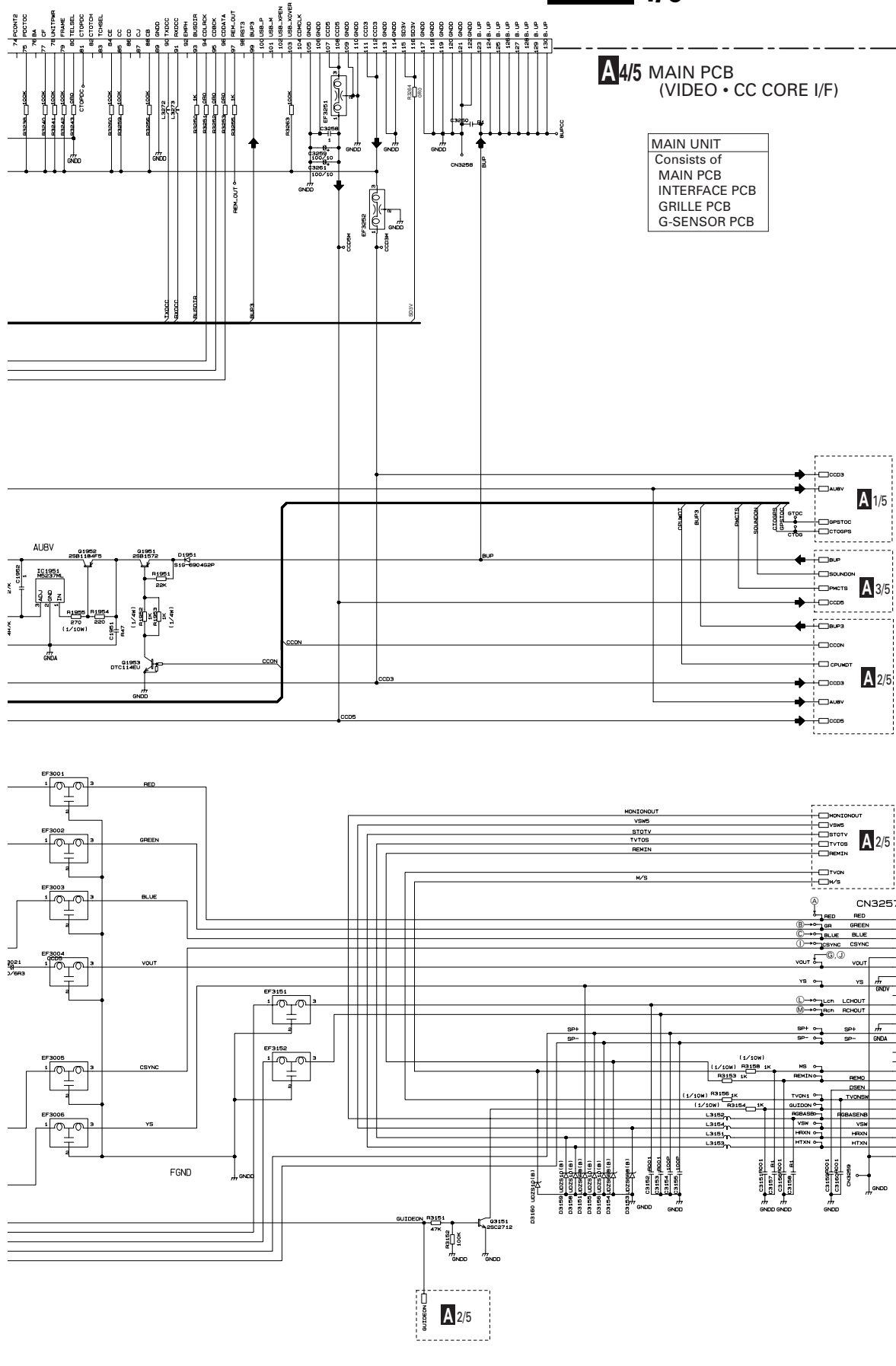
C

D



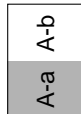


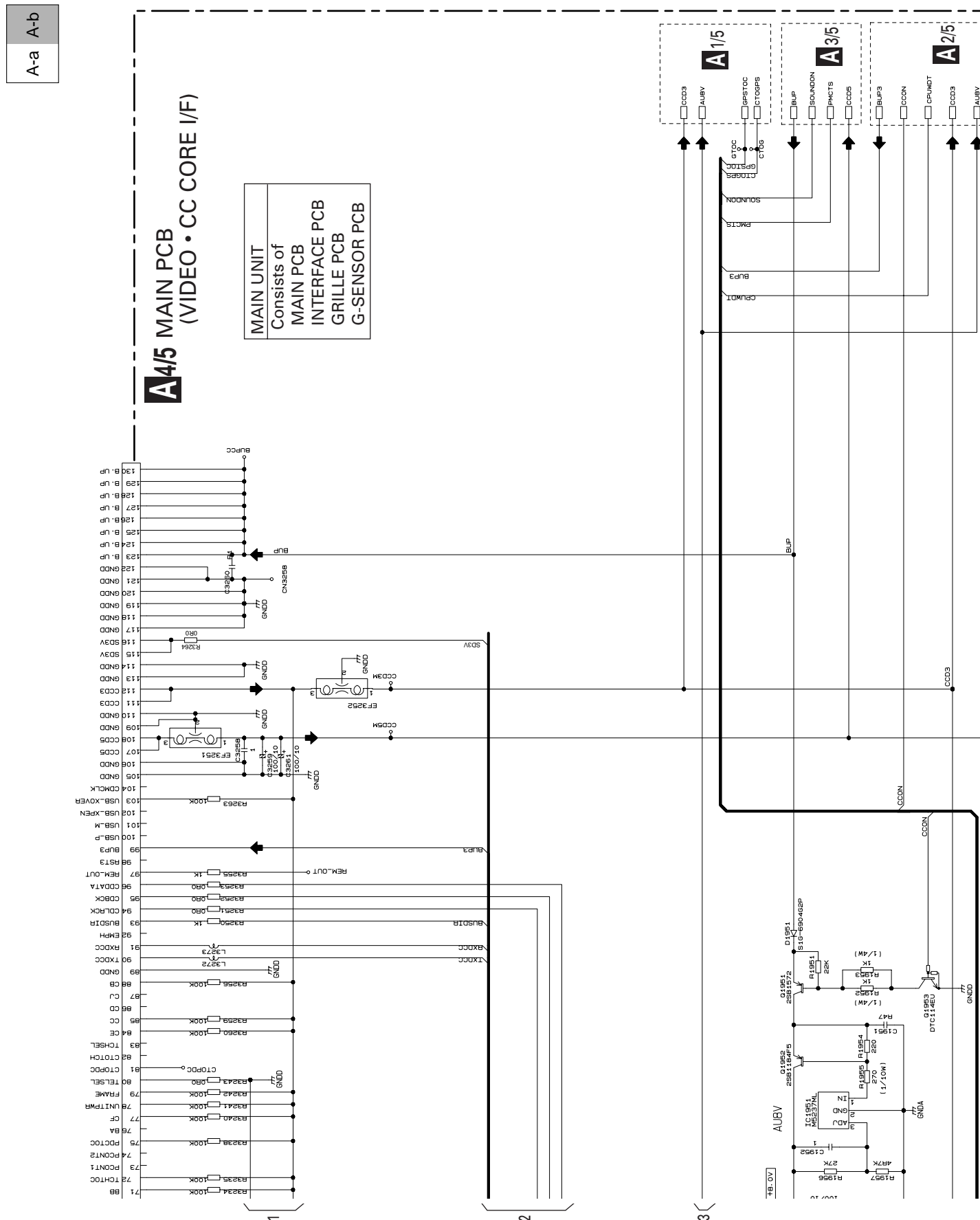
A-b 4/5

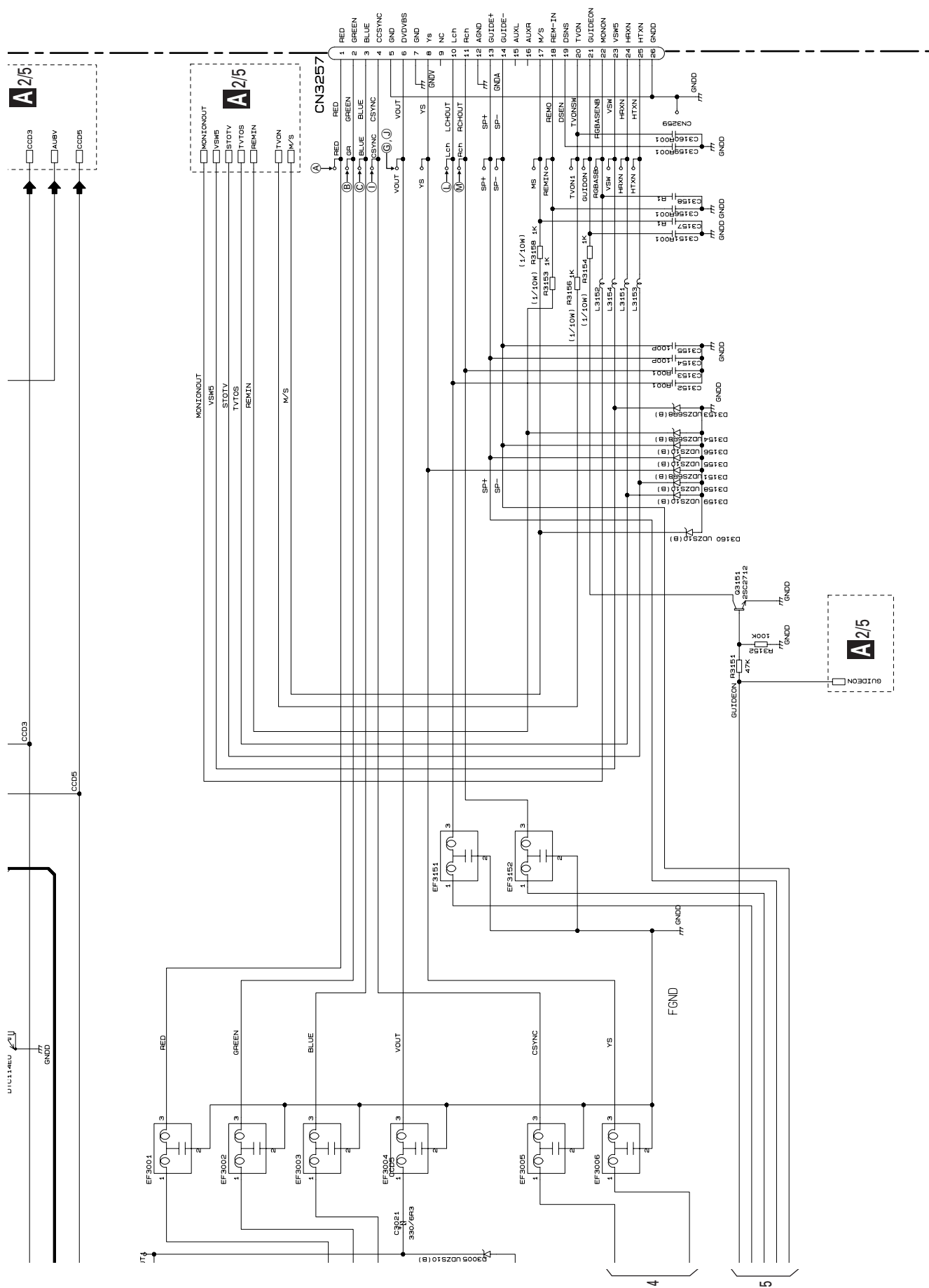


CORD ASSY

A **4/5**







A-a A-b

A

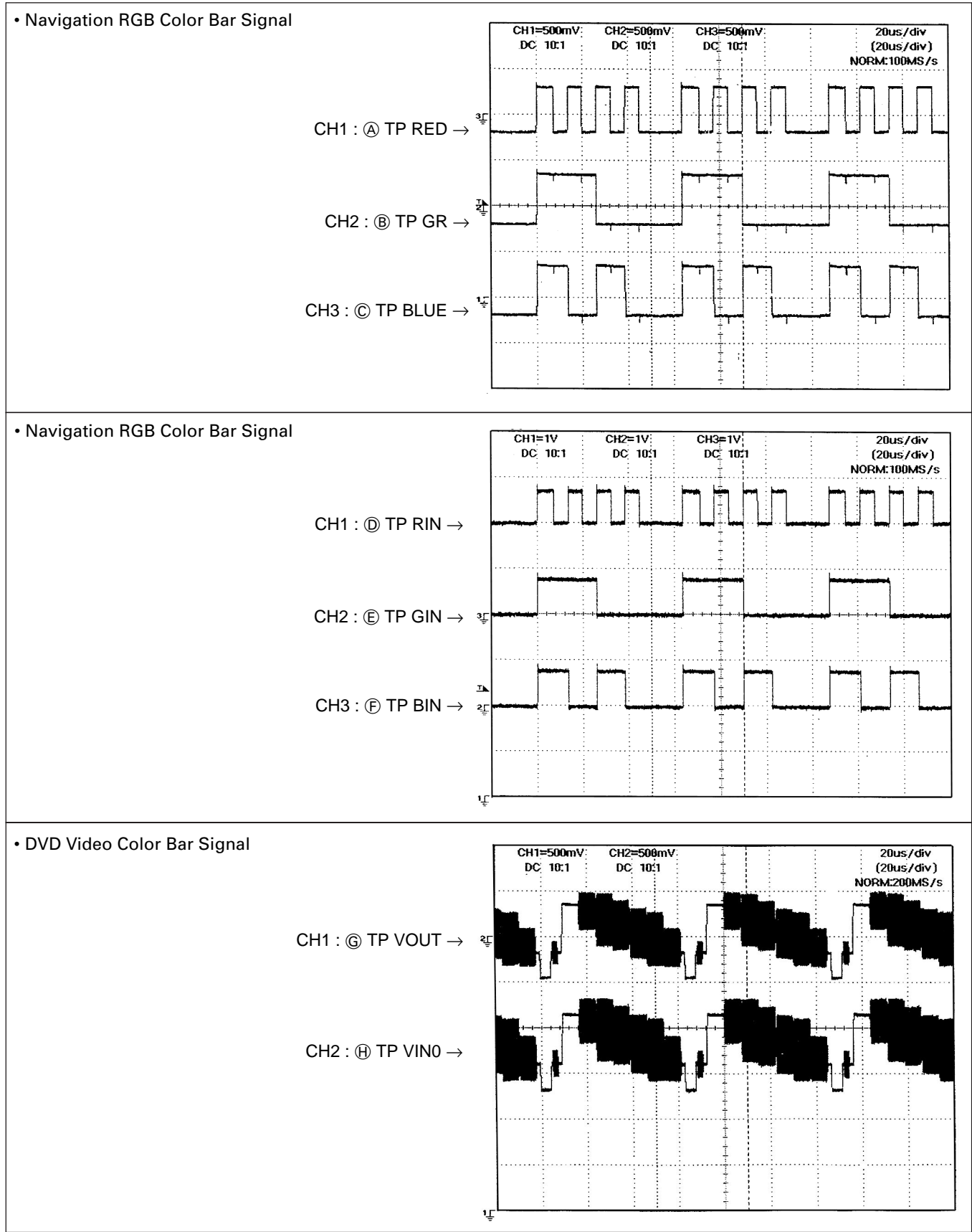
B

C

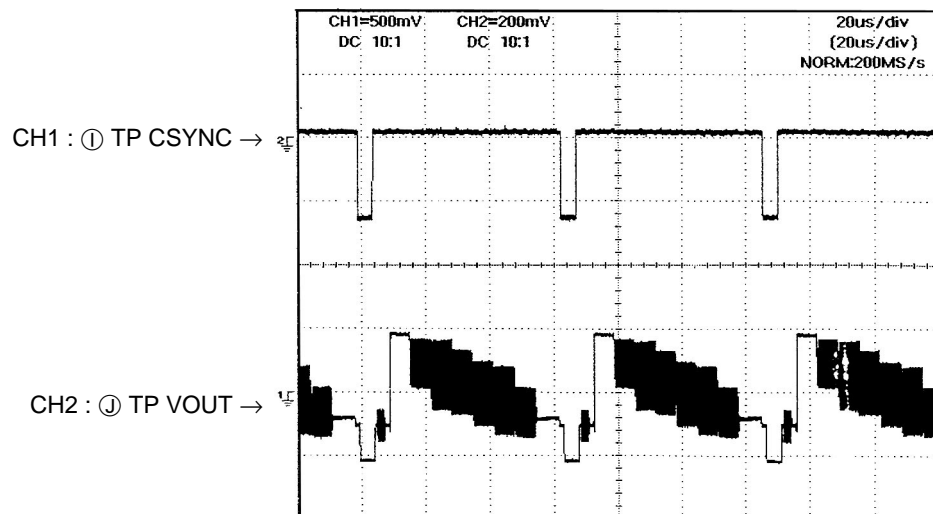
D

Note: The encircled numbers denote measuring pointes in the circuit diagram.

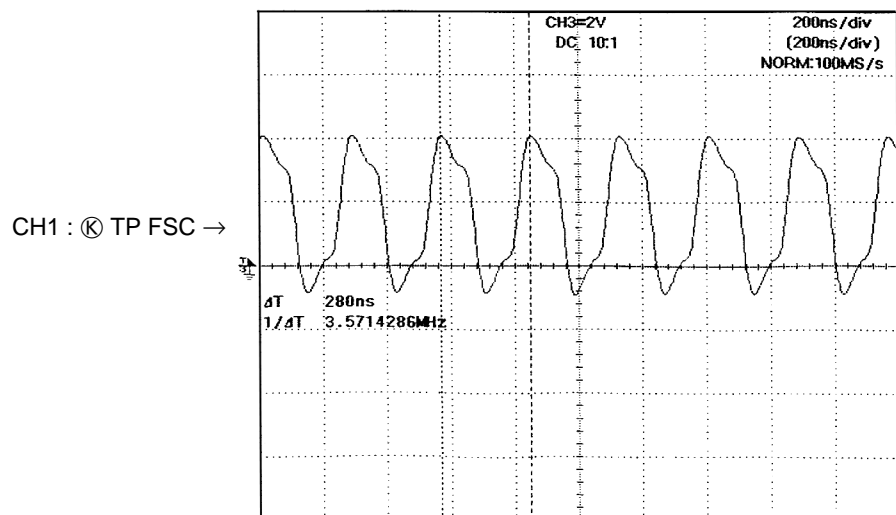
● Waveforms



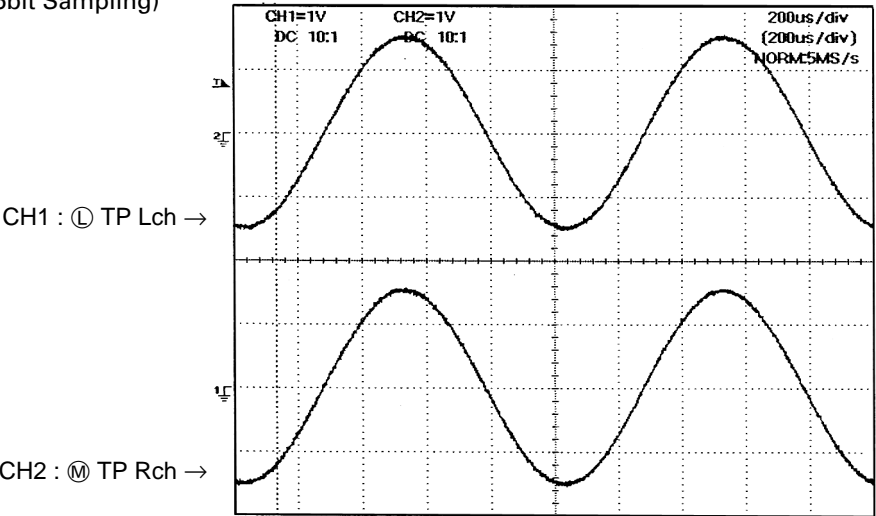
• DVD Video Color Bar Signal



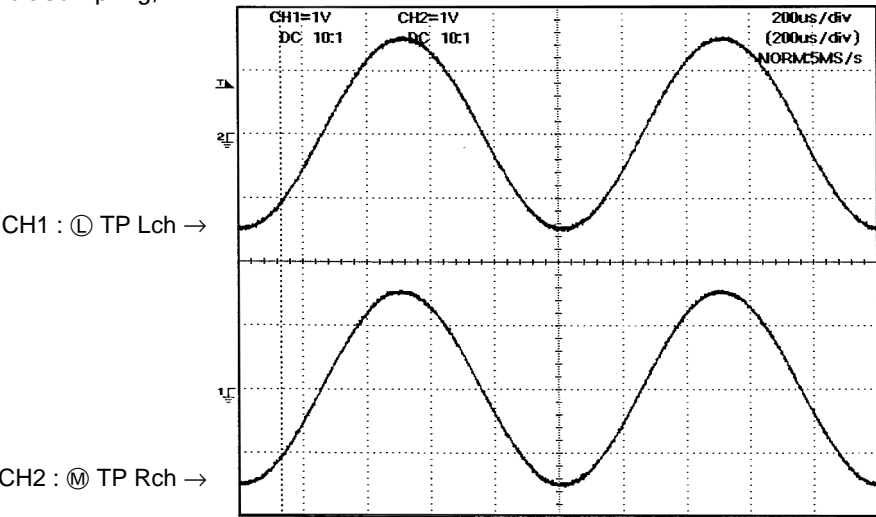
• DVD Video Color Bar Signal



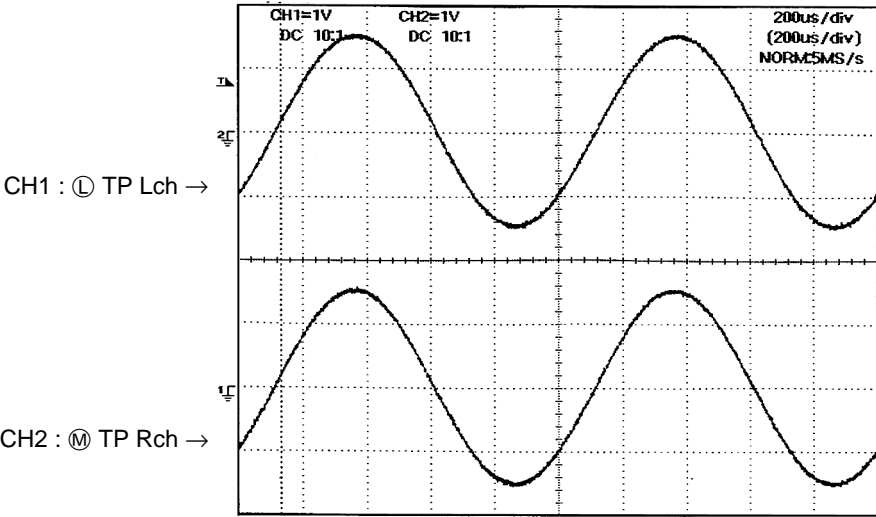
- DVD Video : 1kHz, 0dB (48kHz and 16bit Sampling)
- * The A1 Disk is used.



- DVD Video : 1kHz, 0dB (90kHz and 24bit Sampling)
- * The A1 Disk is used.



- CDDA : 1kHz, 0dB
- * The TCD-785 Disk is used.



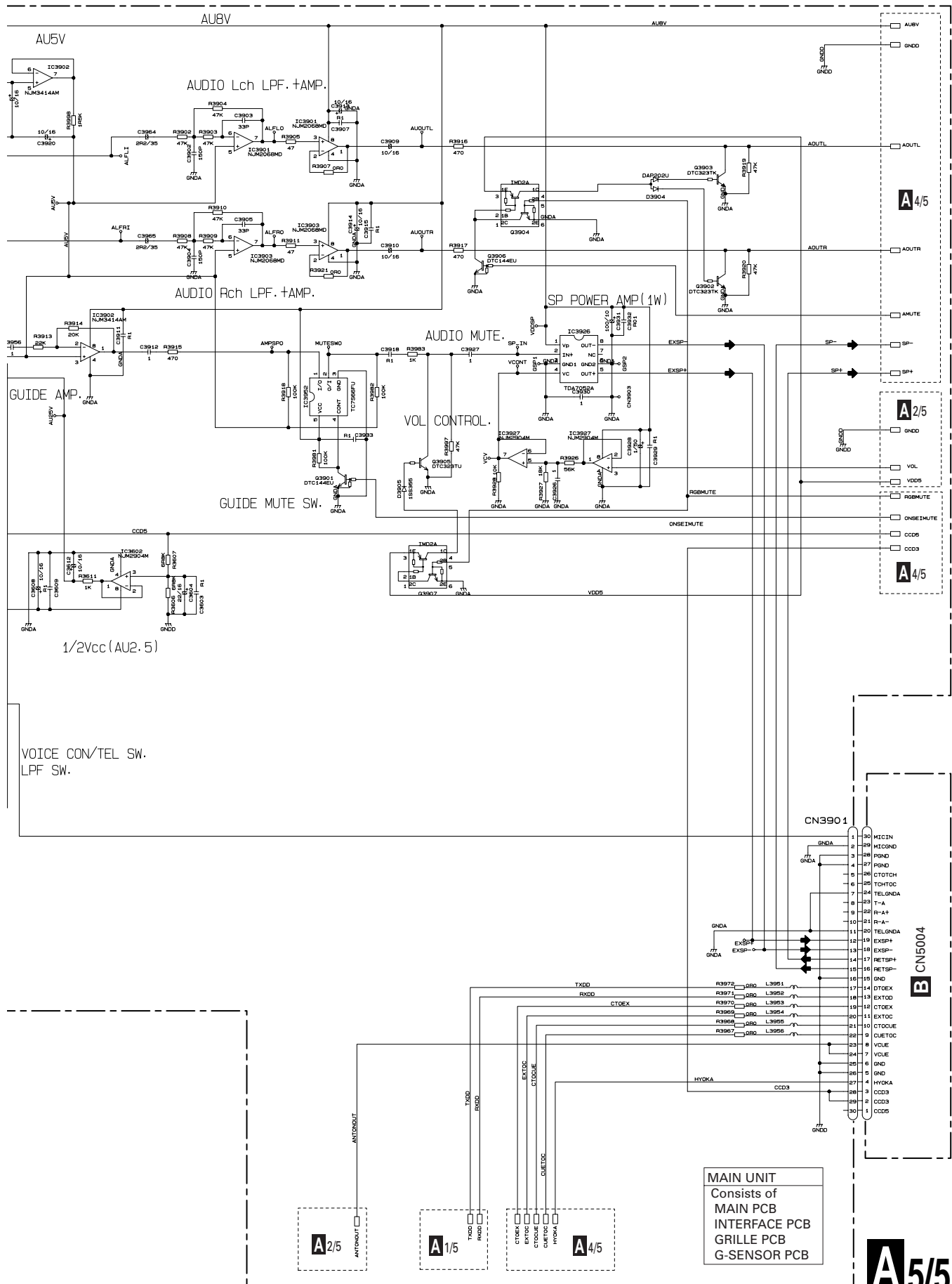
A-a 5/5

A_{4/5}

A 4/5

A 4/5

A-b 5/5

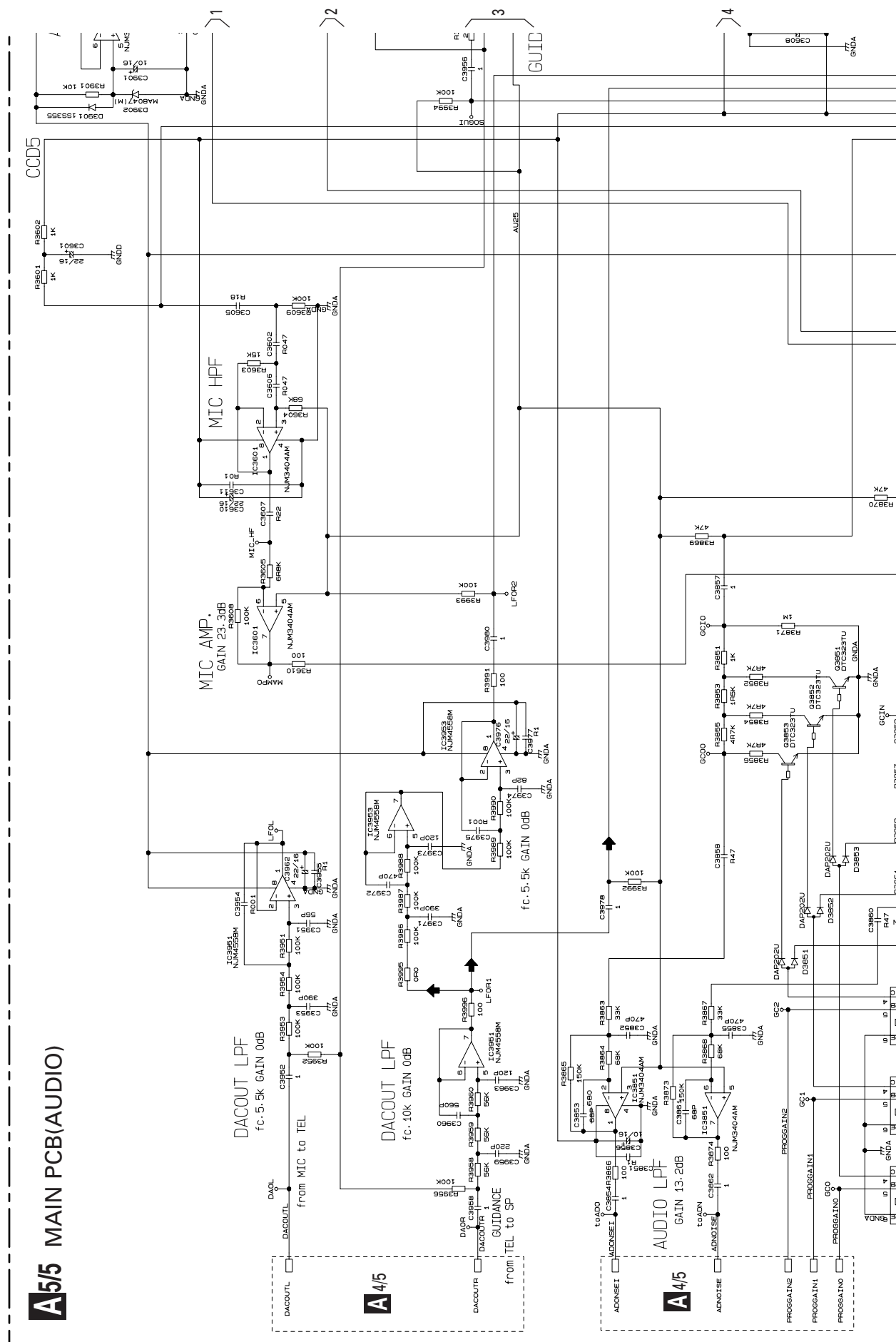


A

B

C

D





A-a A-b

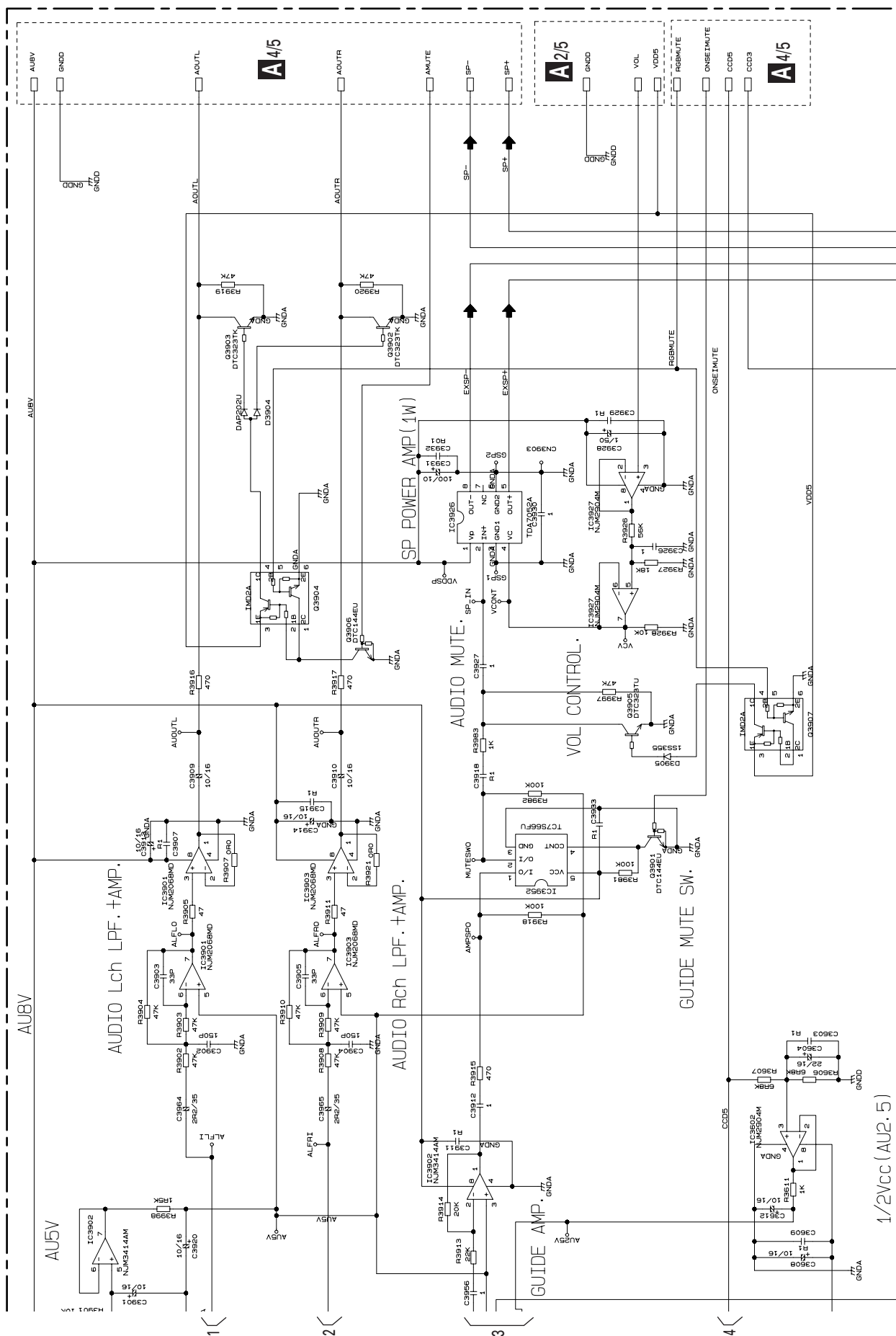
A

B

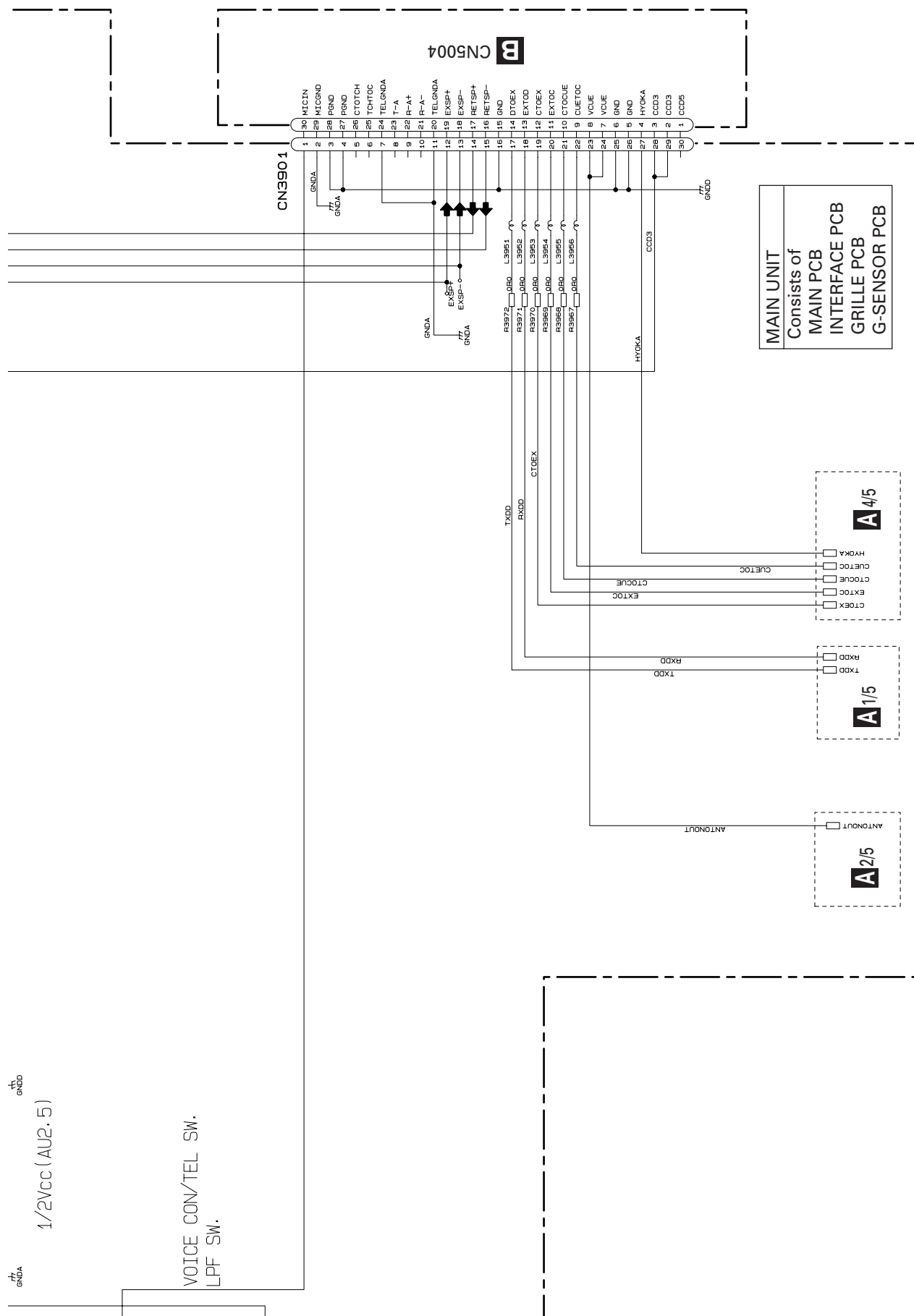
C

D

A-a A-b



1/2Vcc (AU2.5)



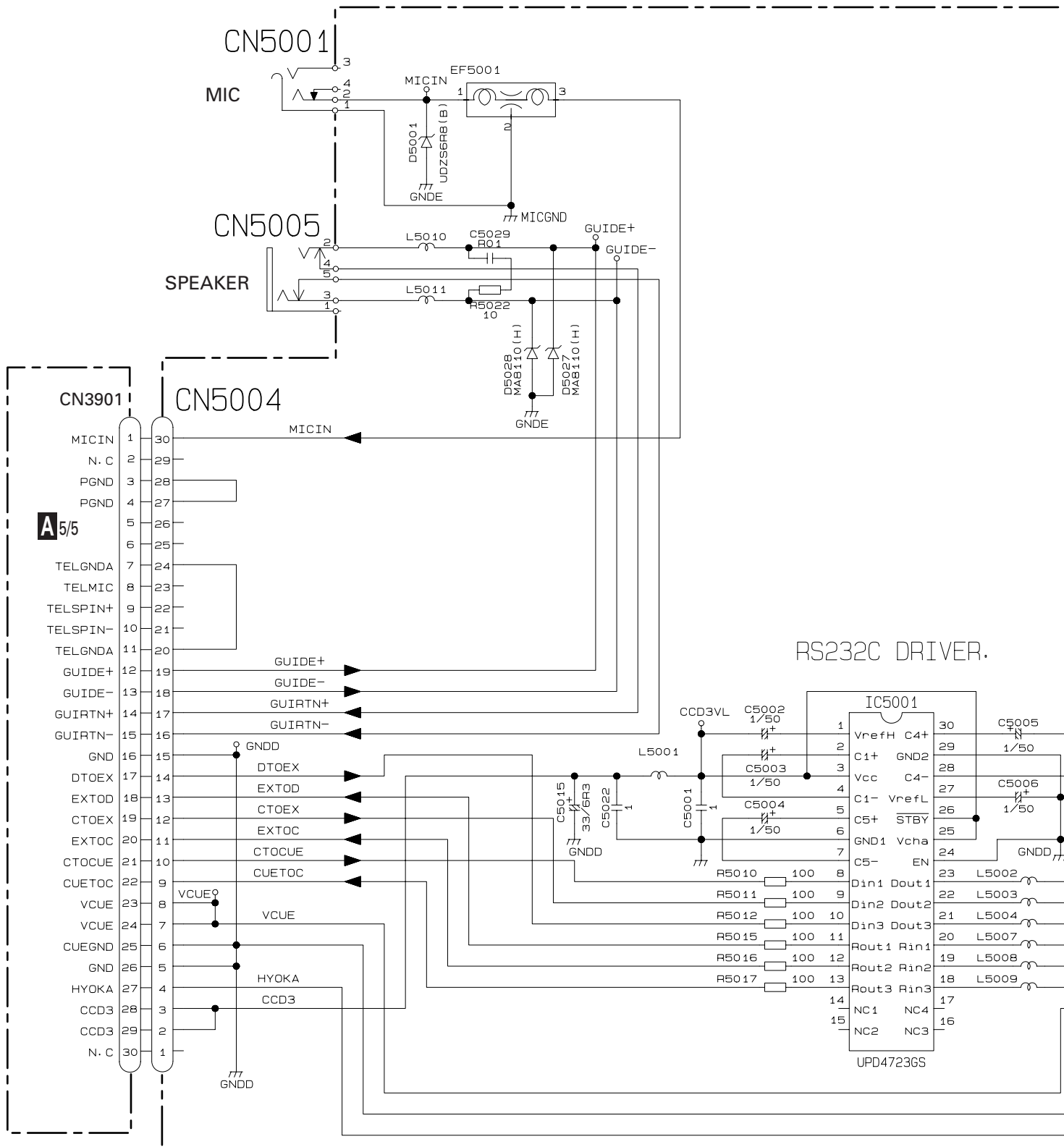
3.8 INTERFACE PCB

A

B

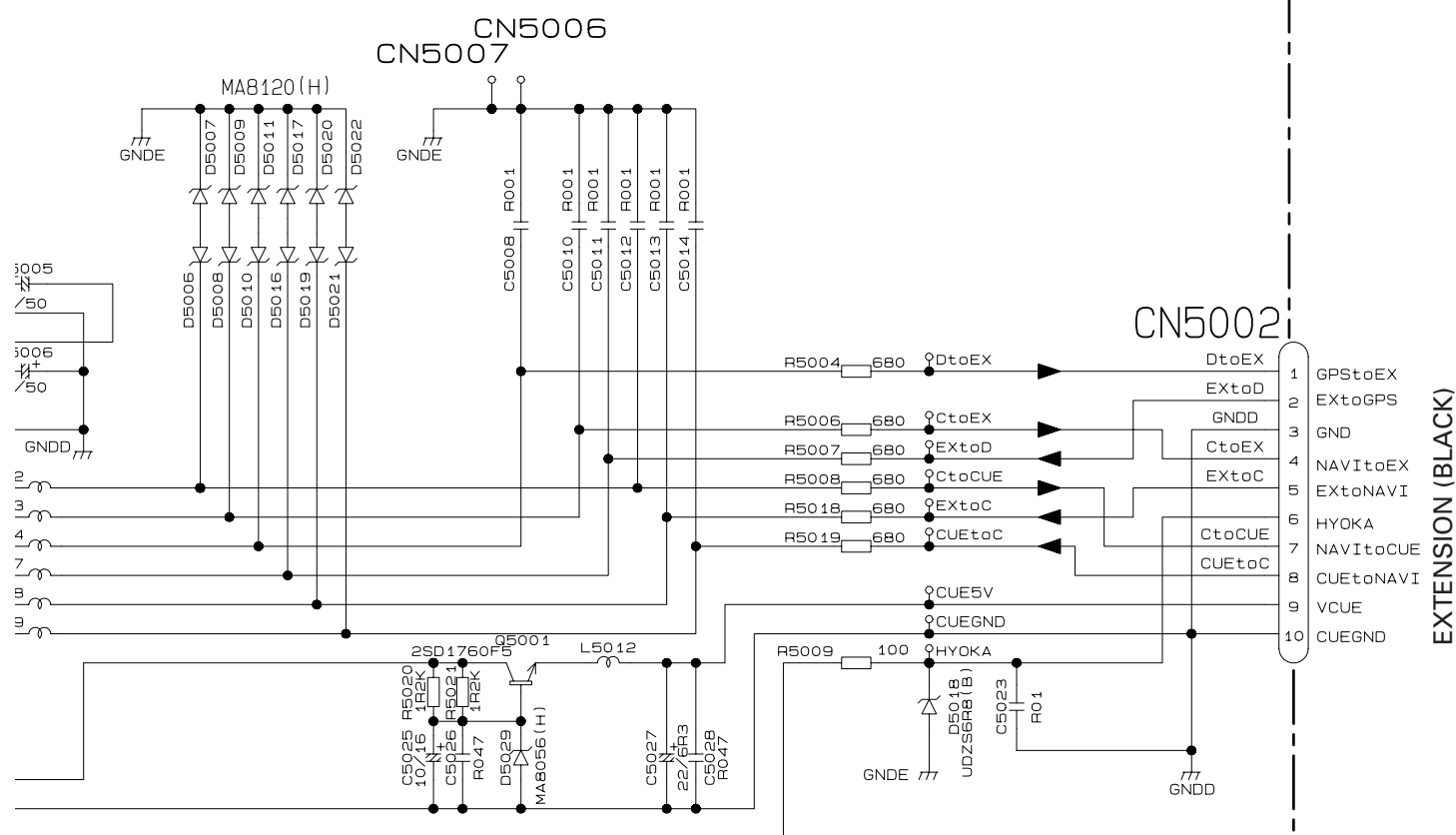
C

D



B INTERFACE PCB

MAIN UNIT
Consists of MAIN PCB INTERFACE PCB GRILLE PCB G-SENSOR PCB

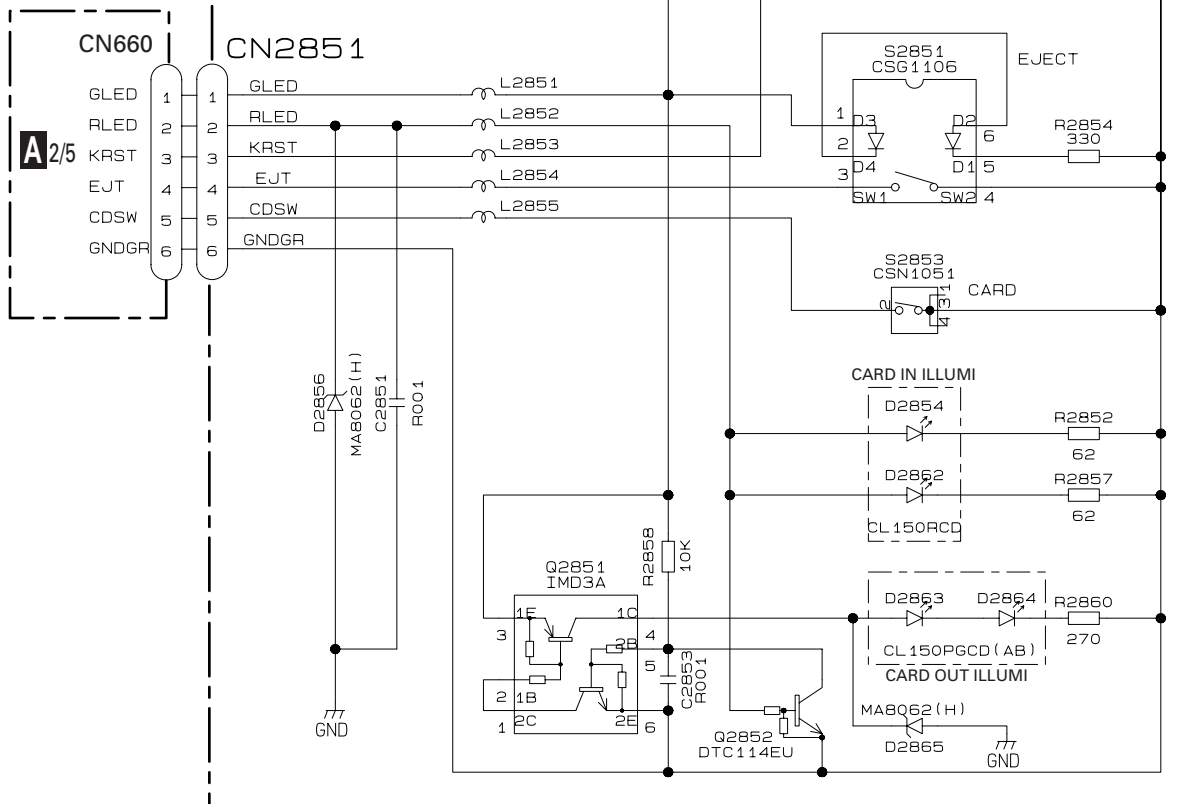


3.9 GRILLE PCB

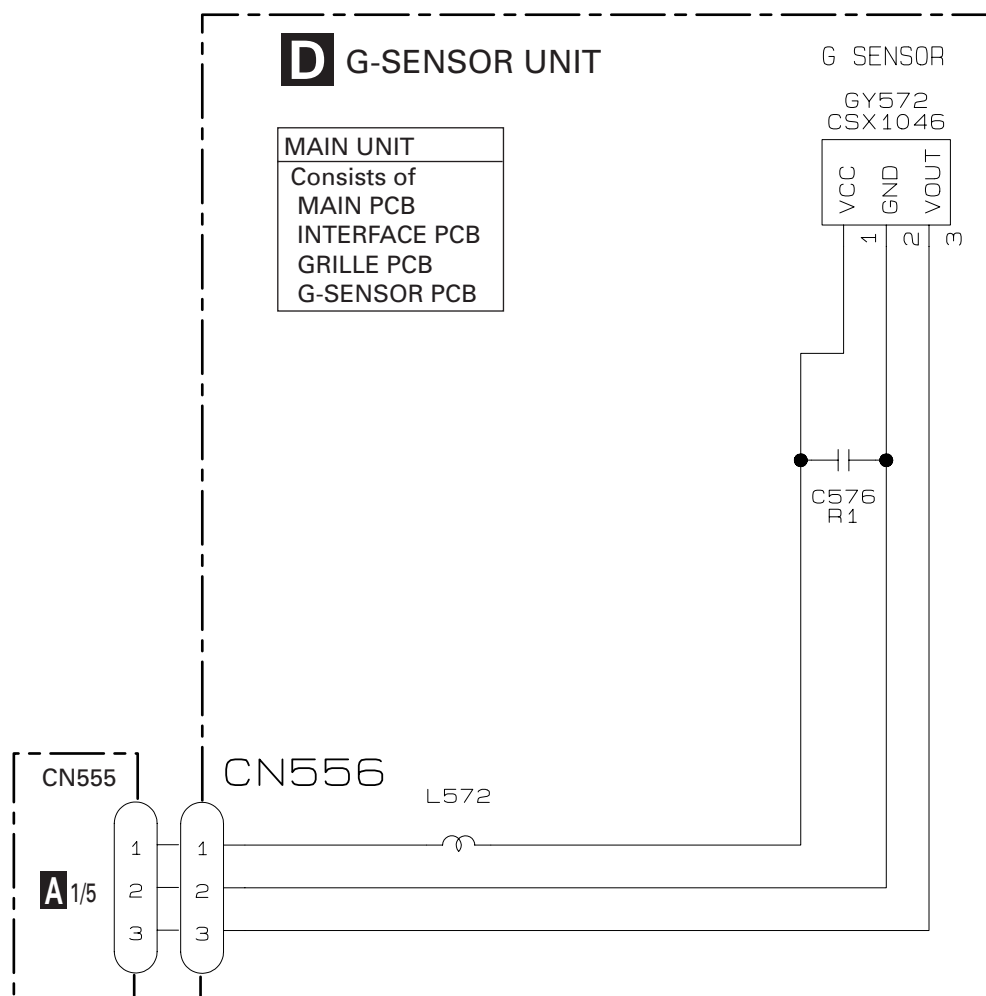
C GRILLE PCB

MAIN UNIT

Consists of
MAIN PCB
INTERFACE PCB
GRILLE PCB
G-SENSOR PCB



3.10 G-SENSOR UNIT



E-a 1/6

E1/6 CC UNIT(CPU,ASIC,SDRAM)

SDRAM

CN99 CN100

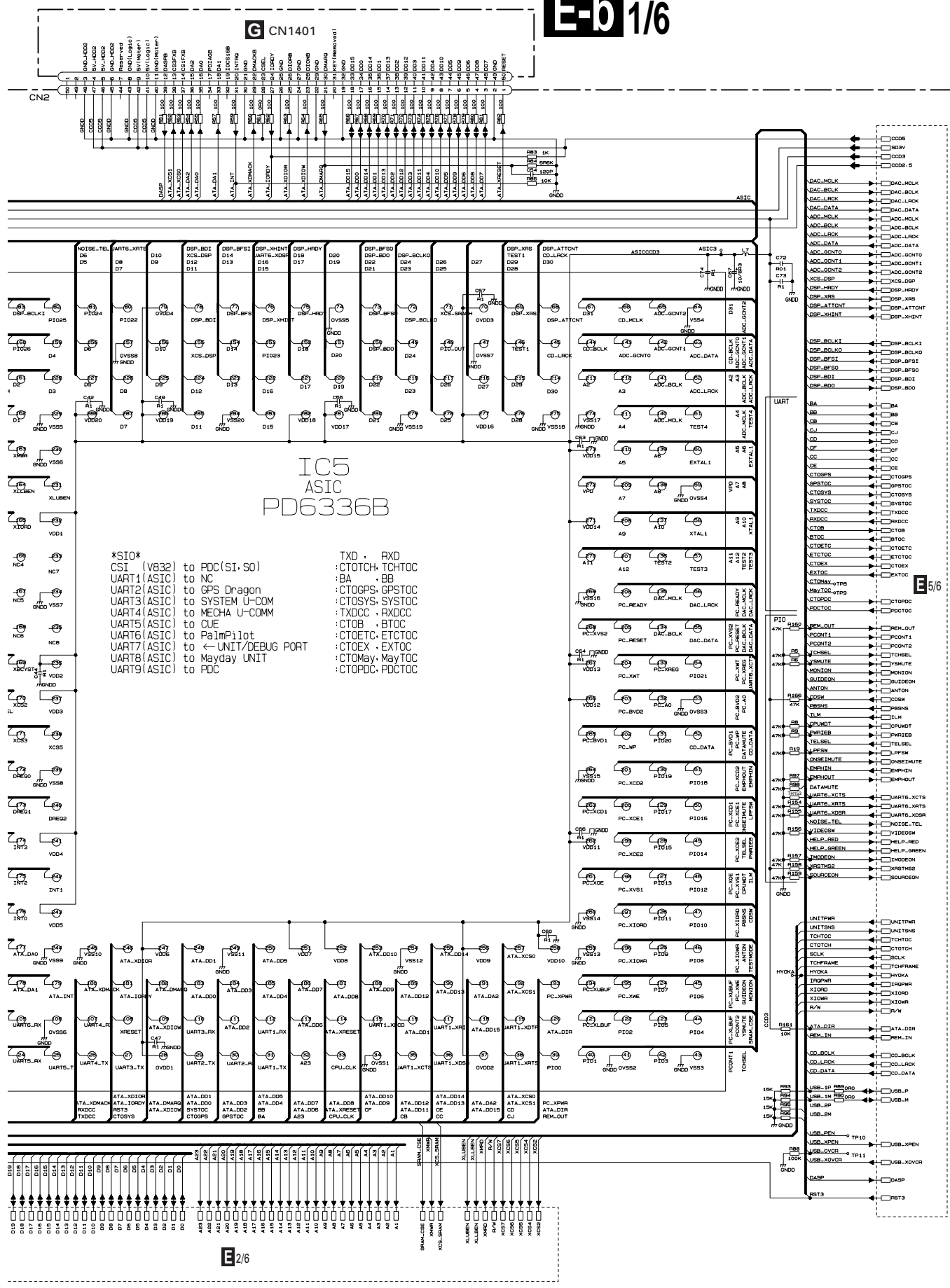
E4/6

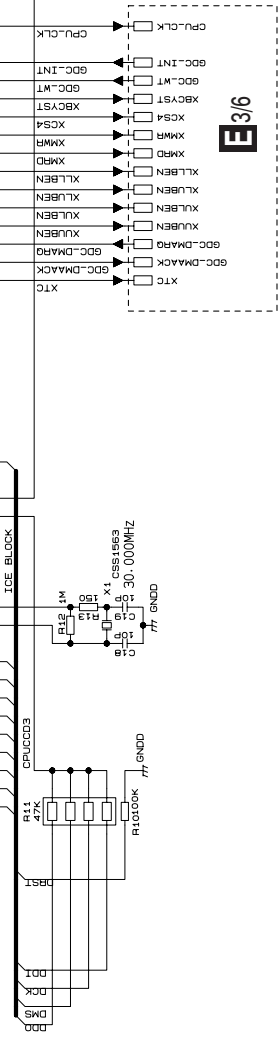
IC2 CPU

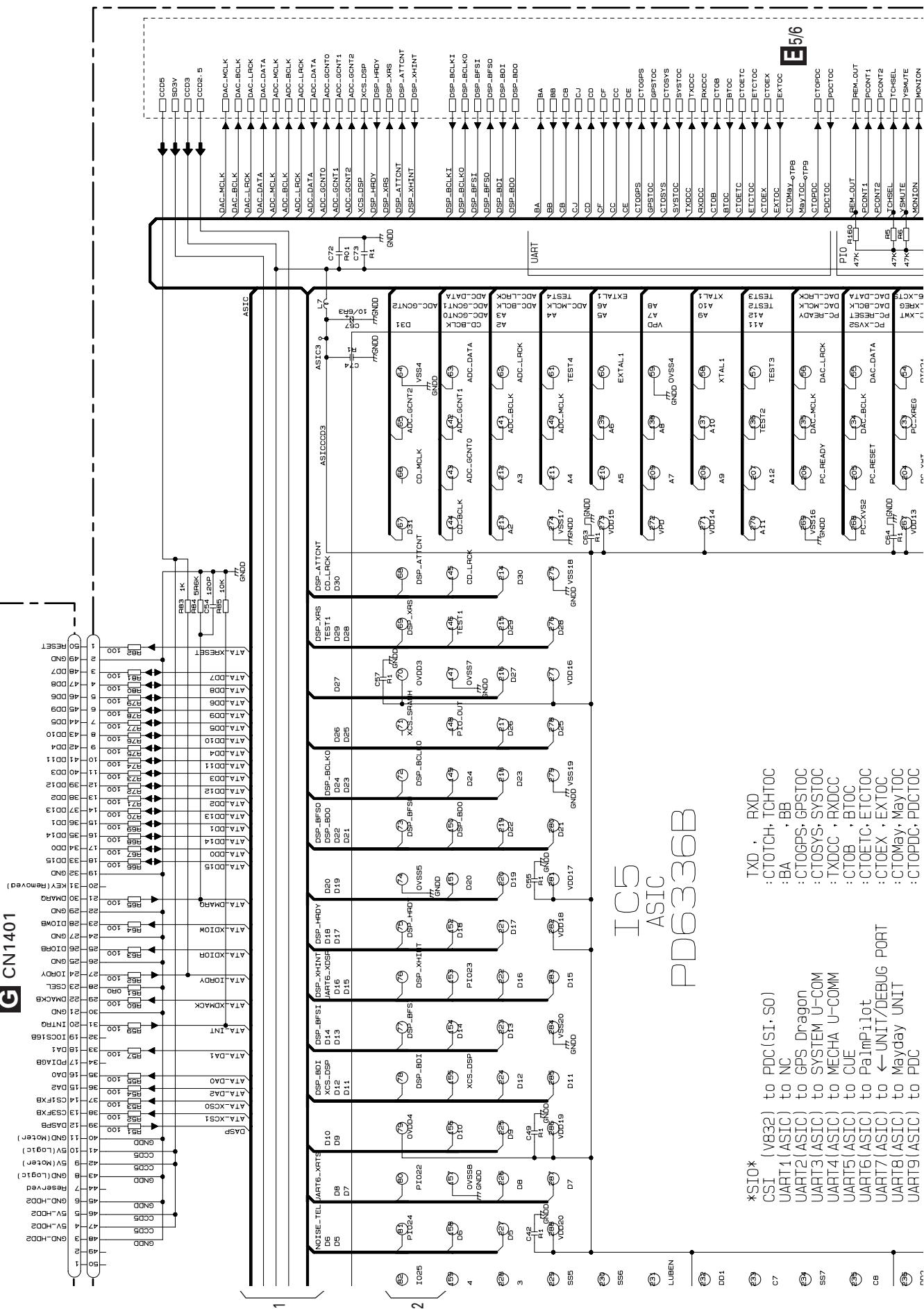
UP07051035M-180

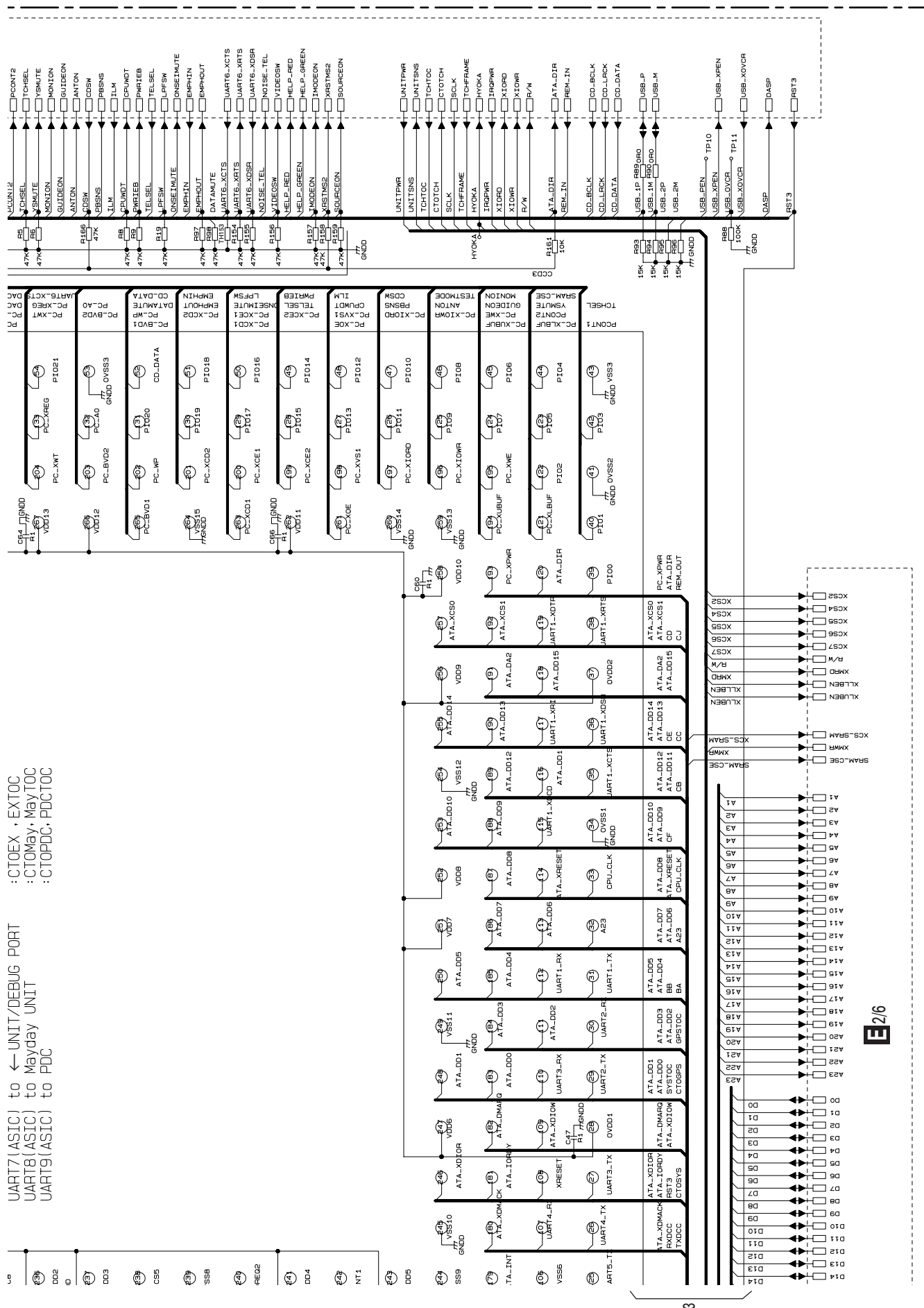
E3/6

E-b 1/6









```

:CTOEX , EXTOC
:CTOMay, MayTOC
:CTOPDC, PDCTOC

```

JART7(ASIC) to ← UNIT/DEBUG PORT
JART8(ASIC) to Mayday UNIT
JART9(ASIC) to PDC

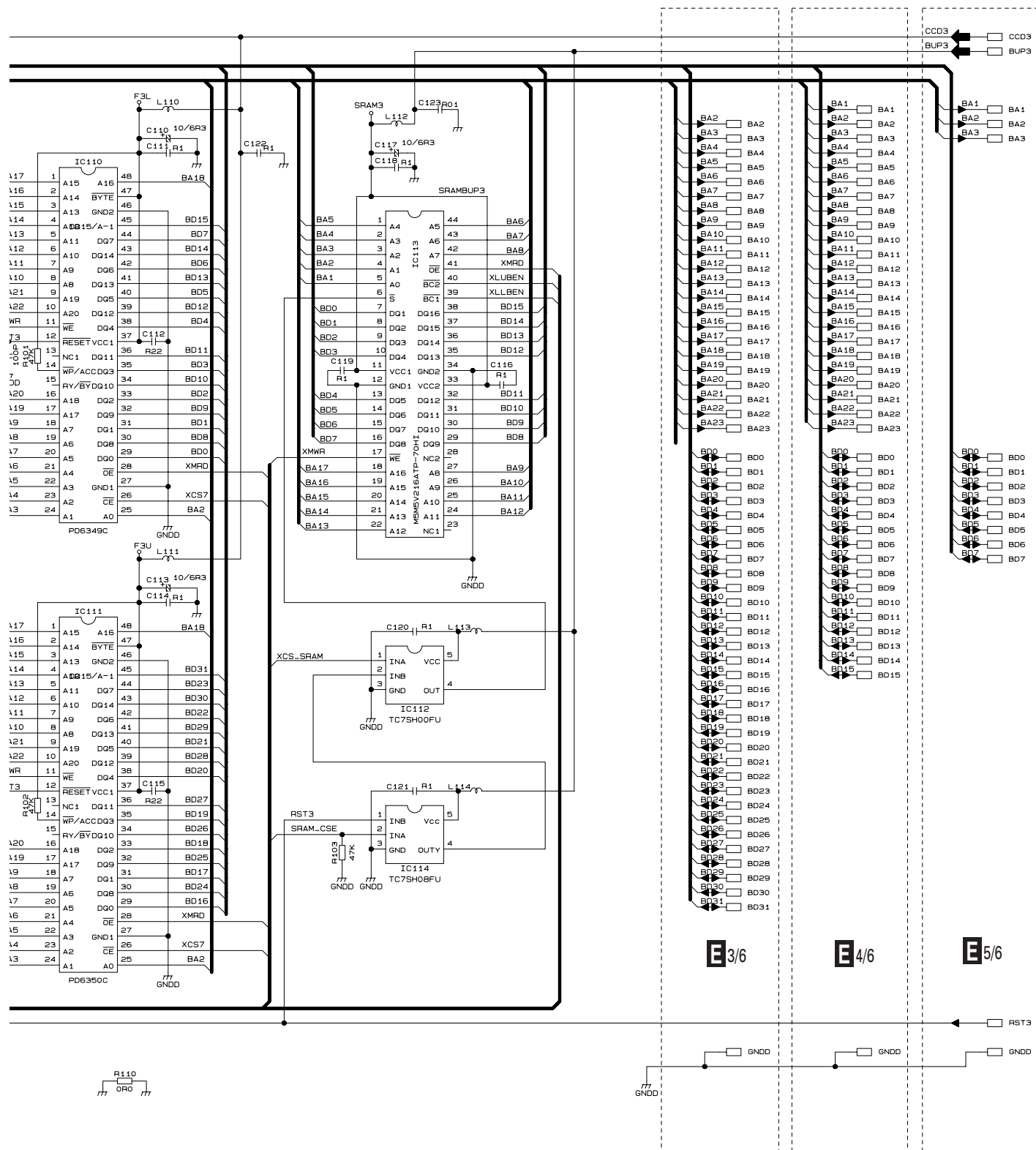
E-a
E-b

E-b 1/6

FlashROM

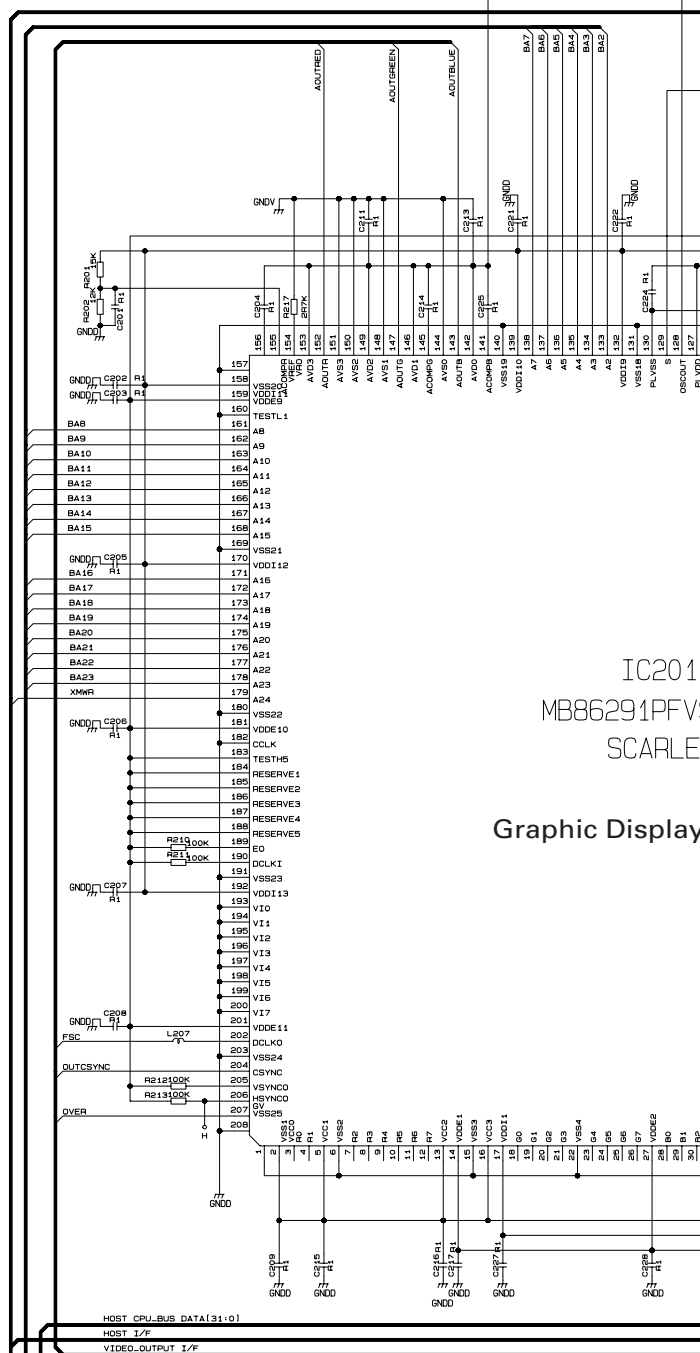
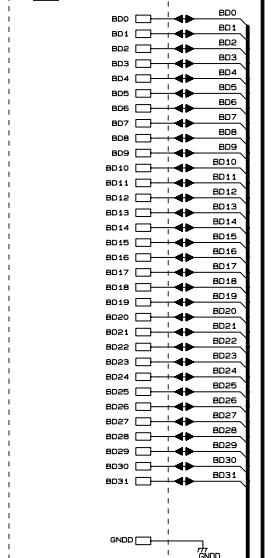
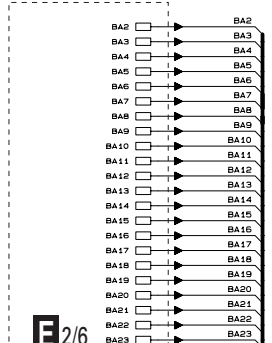
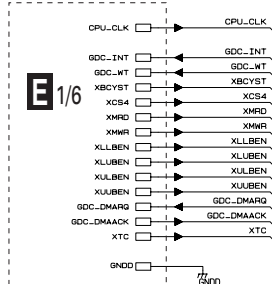
SRAM

E2/6 CC UNIT(ROM,SRAM,BUS-BUFFER)



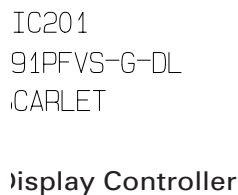
3.13 CC UNIT 3/6 (GRAPHIC)

E3/6 CC UNIT(GRAPHIC)



IC201
MB86291PFV:
SCARLE

Graphic Display



E_{5/6}

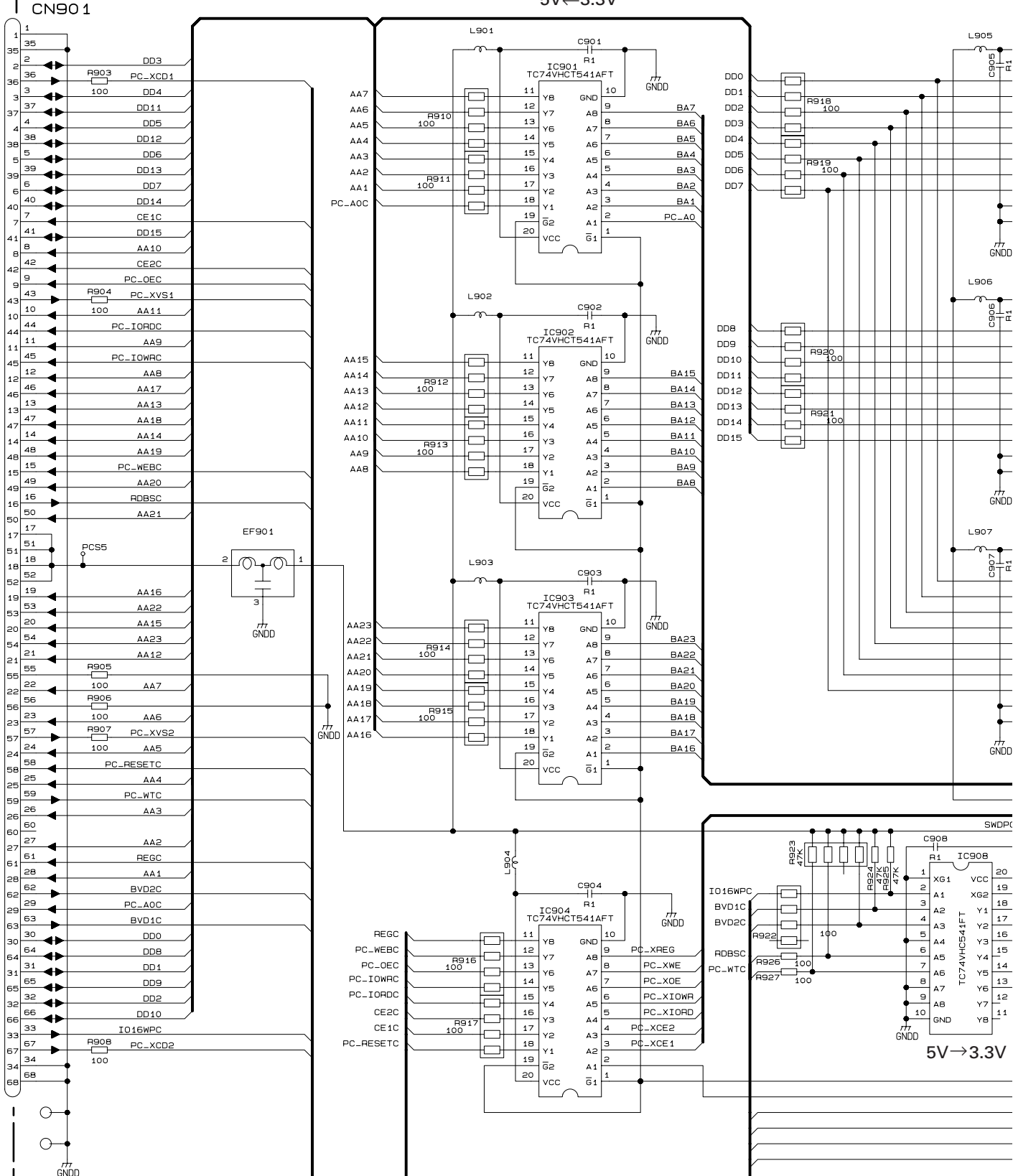
E_{3/6} 59

3.14 CC UNIT 4/6 (PC CARD)

E4/6 CC UNIT(PC CARD)

5V←3.3V

PC CARD



E4/6

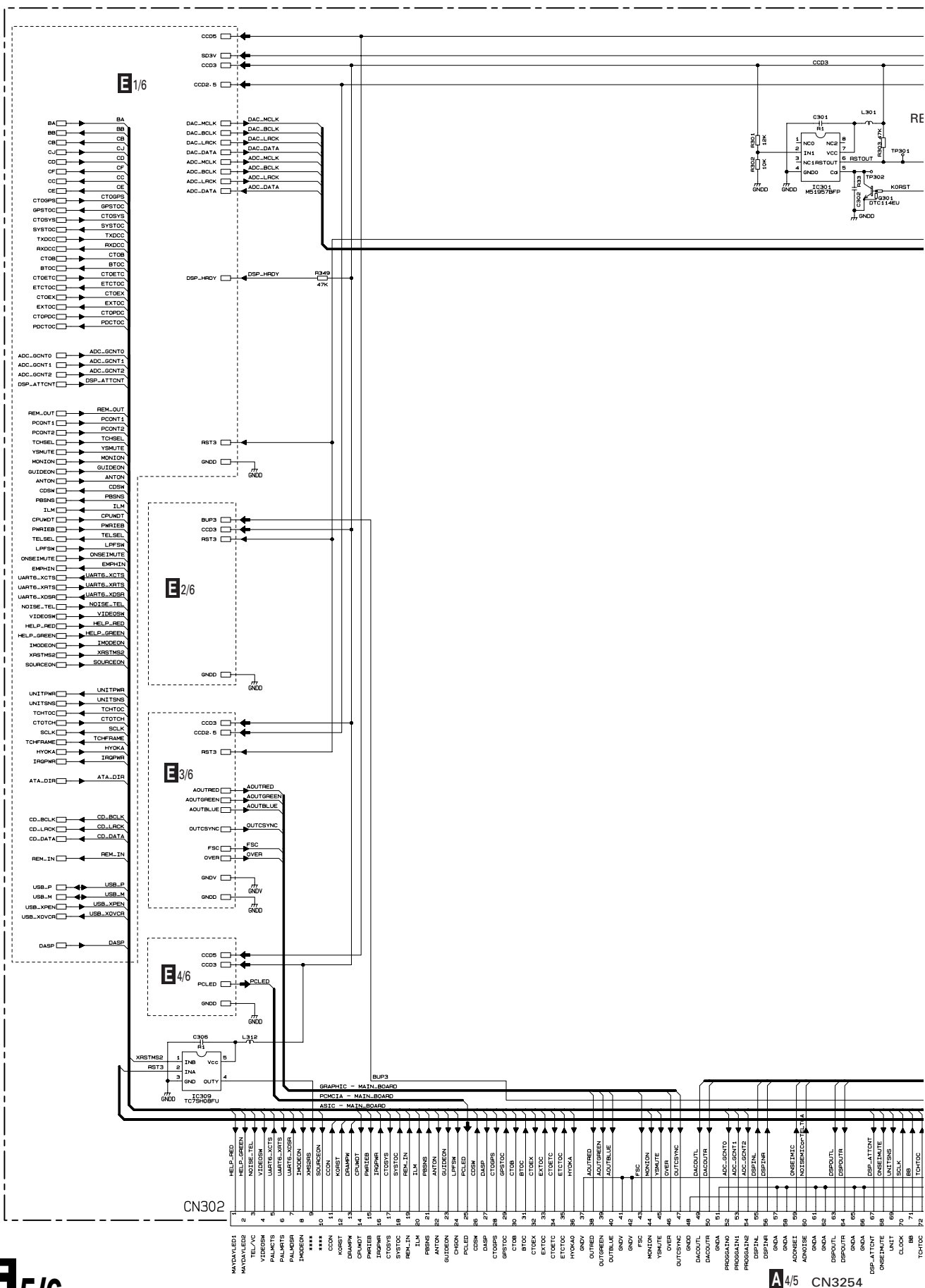


C

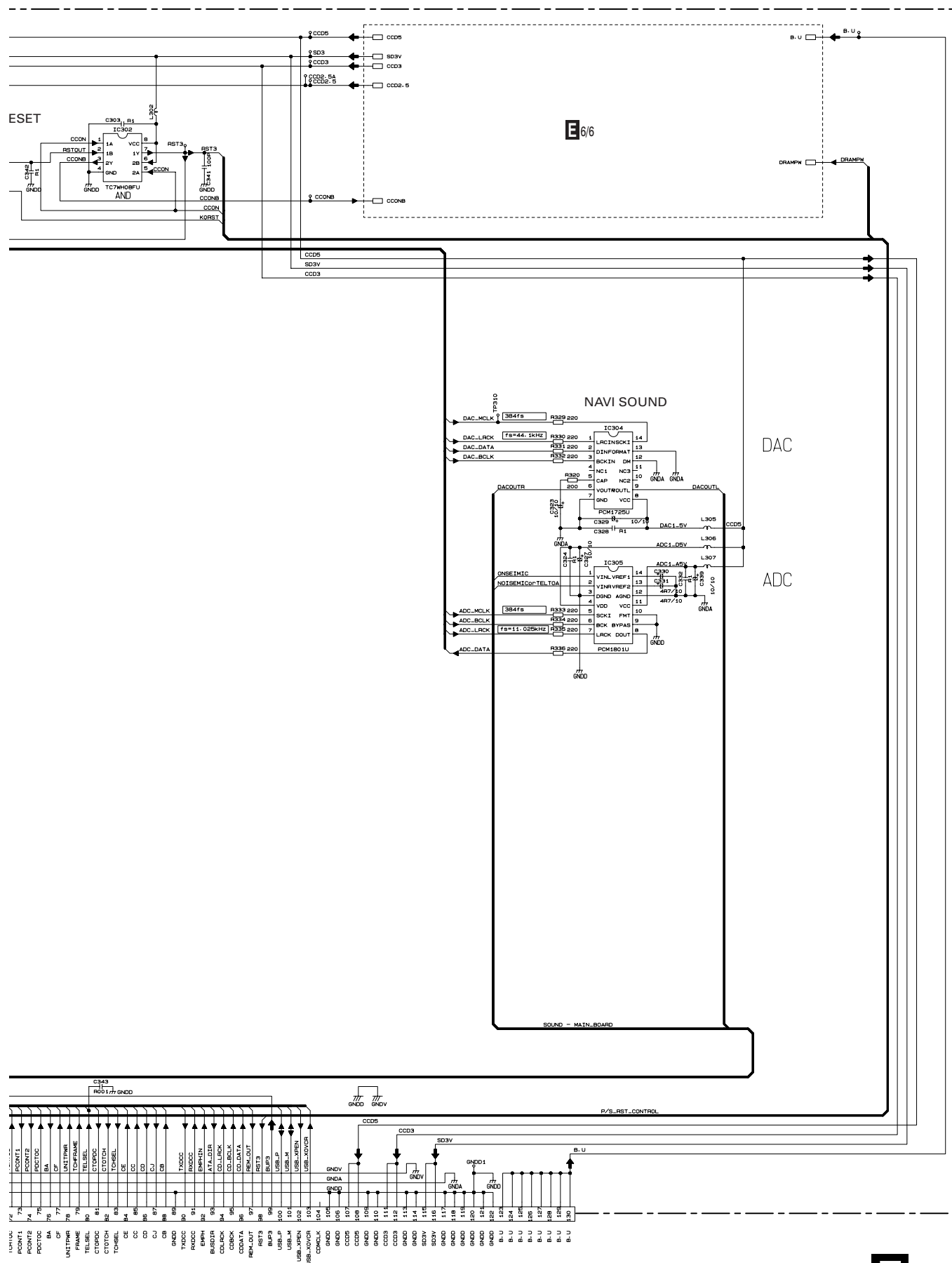
D

3.15 CC UNIT 5/6 (DSP, I/F CONNECTOR)(GUIDE PAGE)

E-a 5/6



E5/6 CC UNIT(DSP,I/F CONNECTOR)

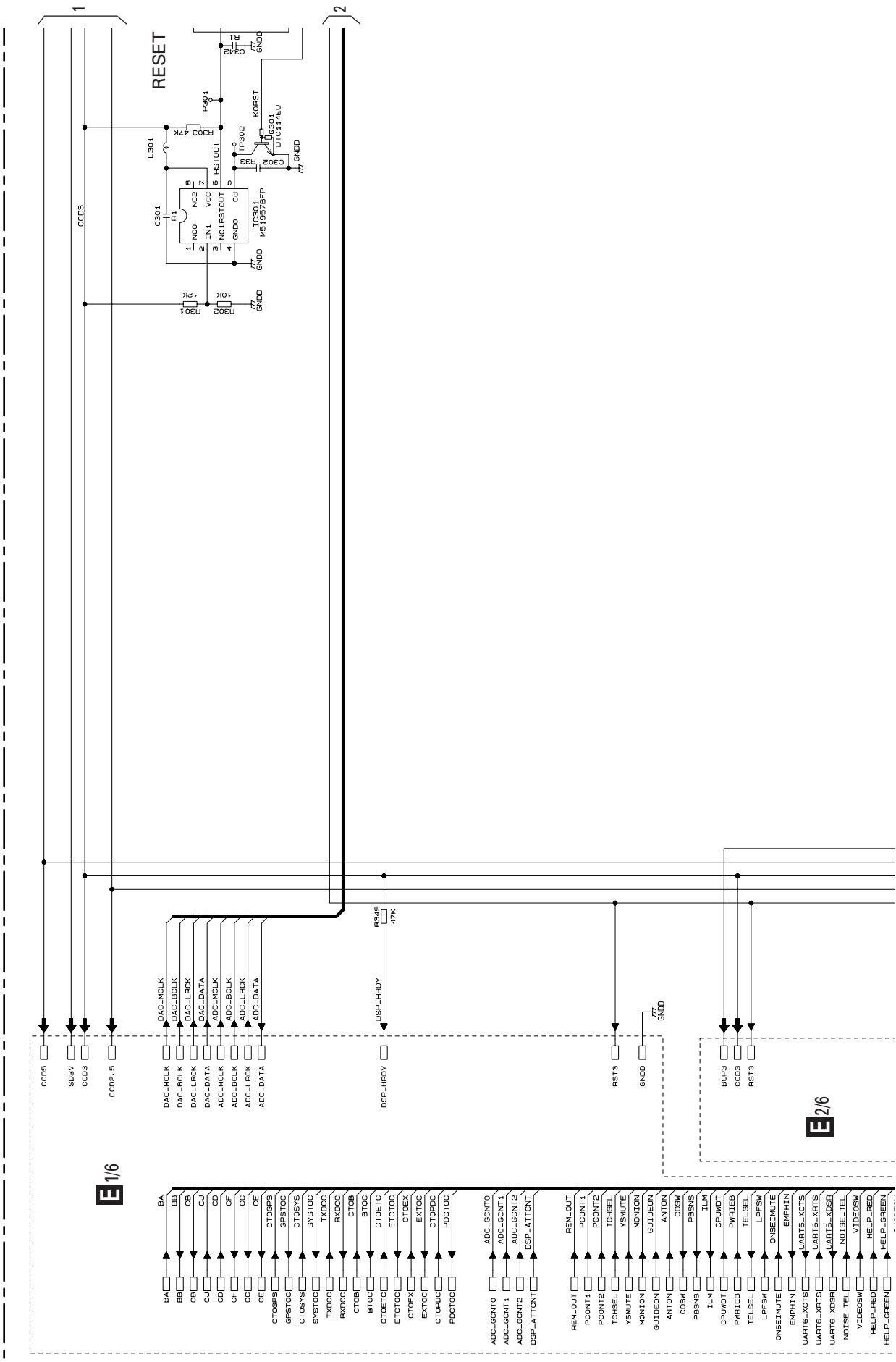


A

B

C

D

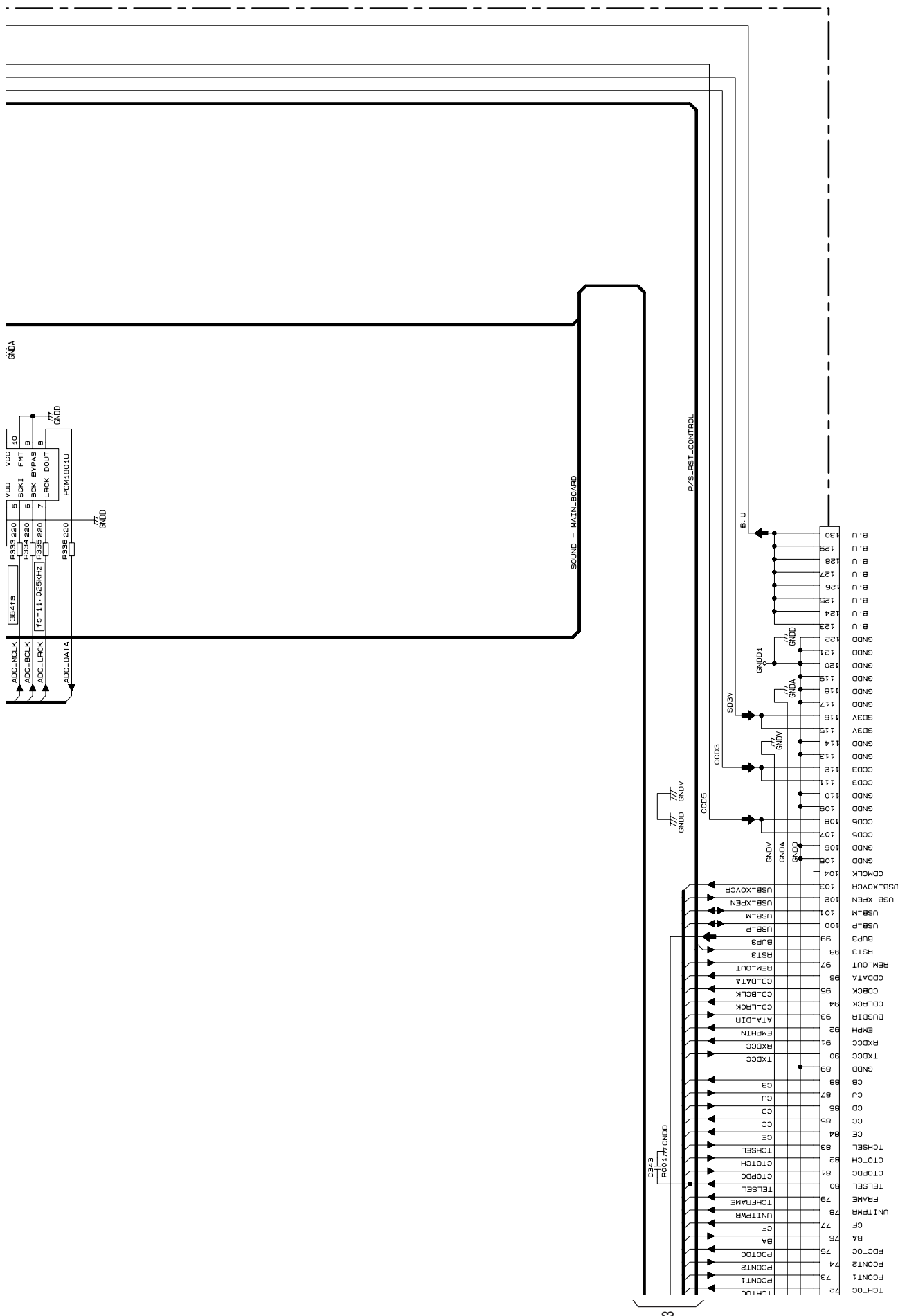




CN302

E-a 5/6

E-a E-b

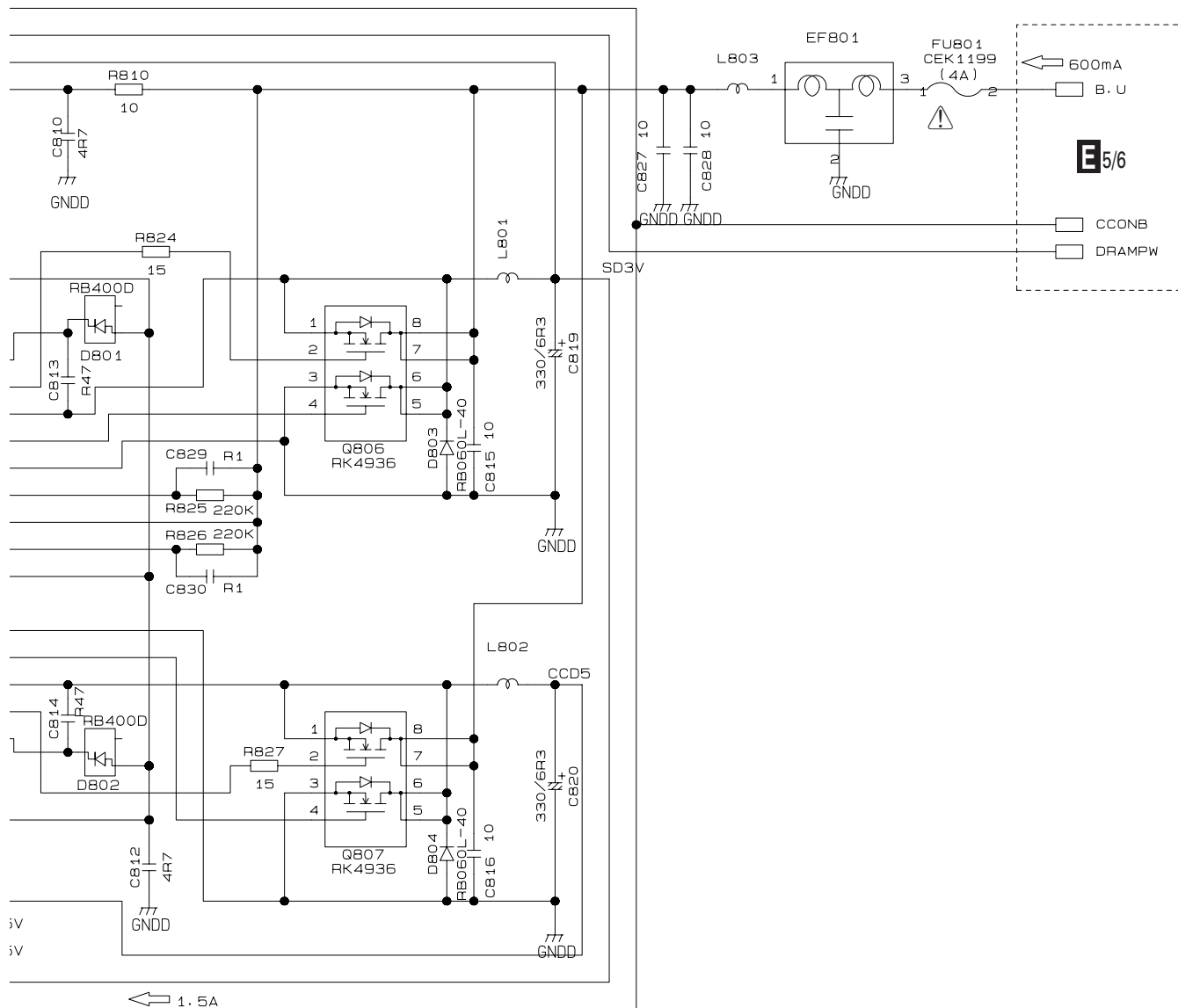


D

DC/DC

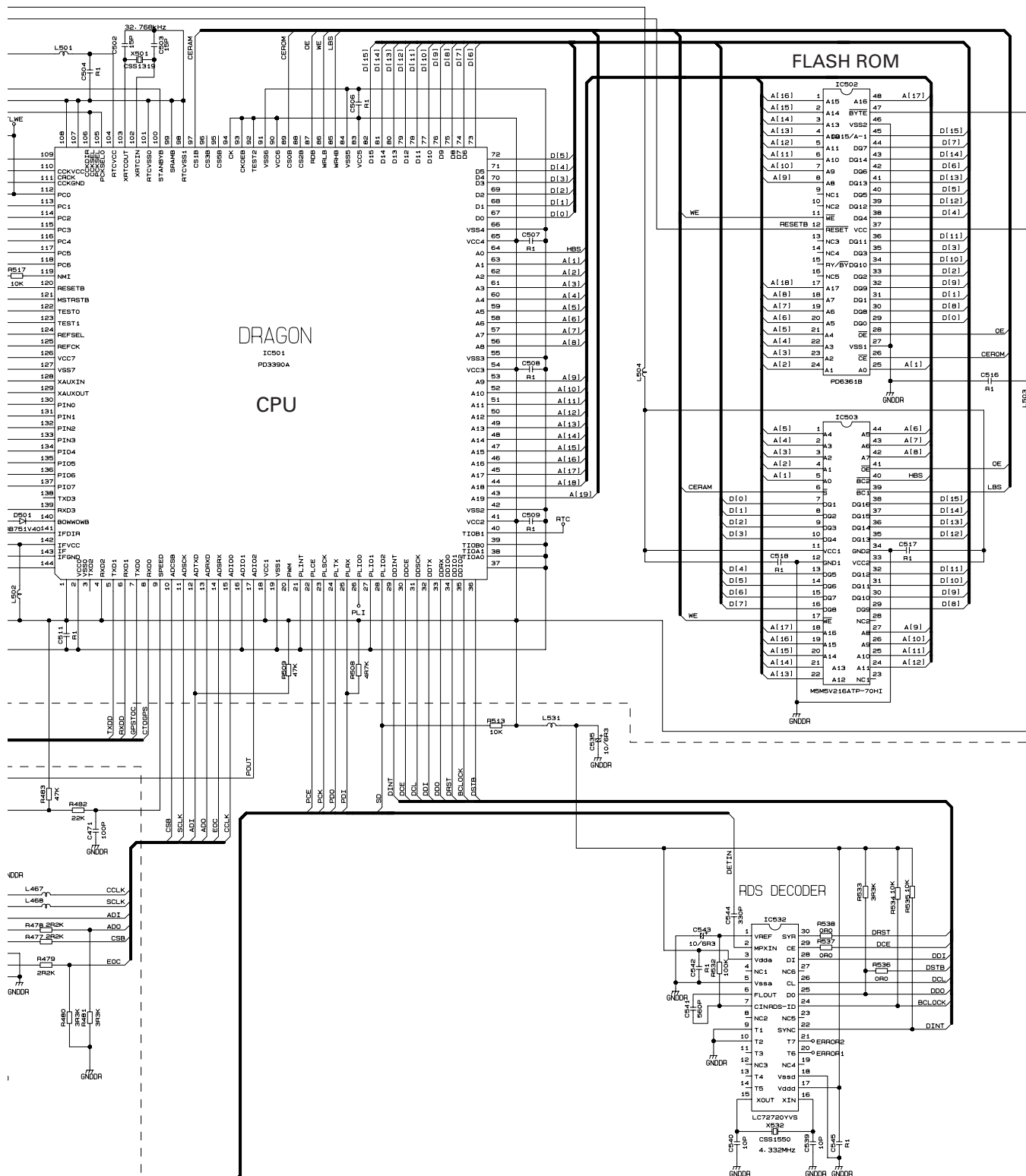


DC/DC Converter $\left(\begin{matrix} 3.3V \\ 5V \end{matrix} \right)$ 2ch



-mode
p-mode

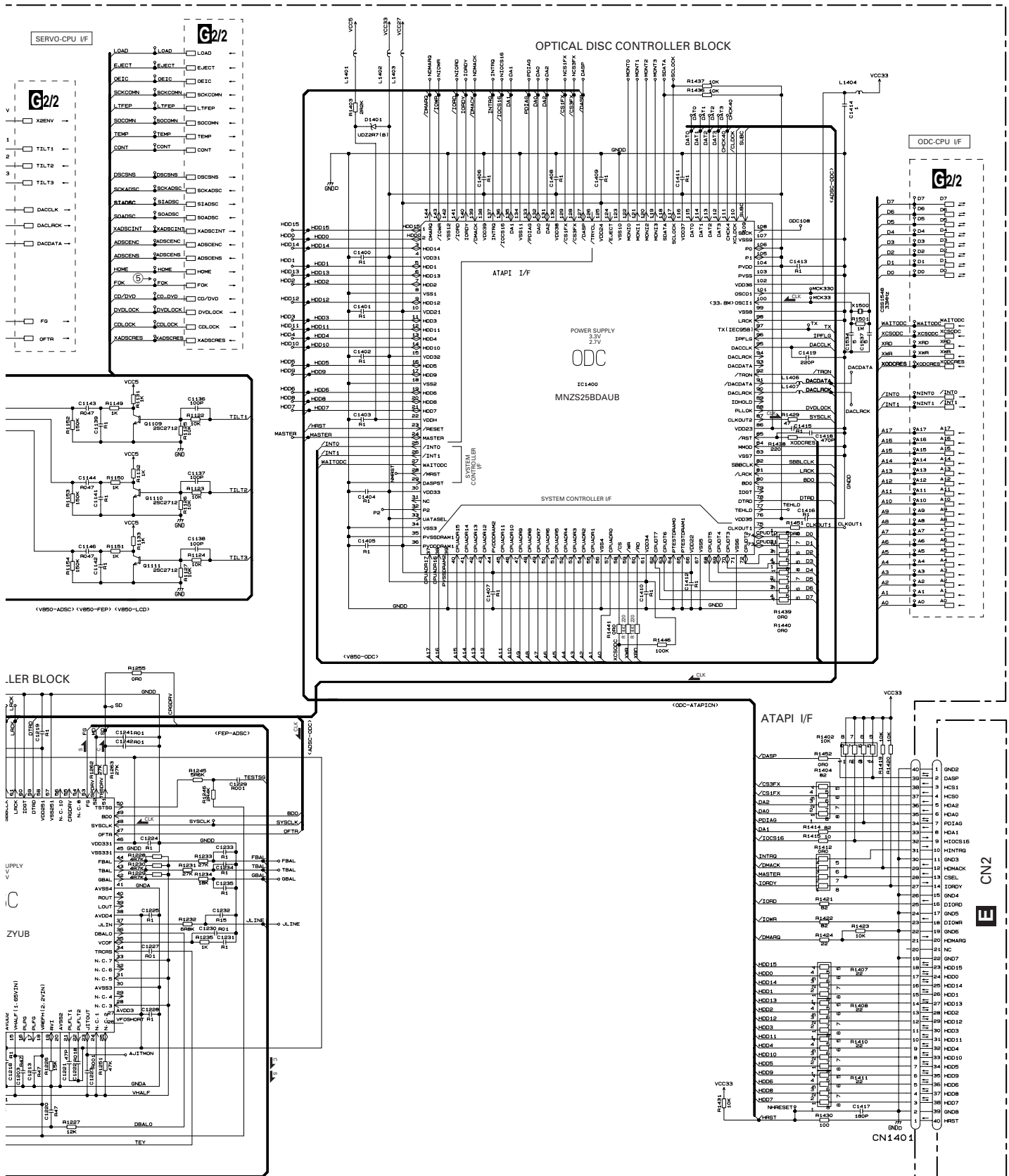




PICKUP UNIT(SERVICE)(DP4)

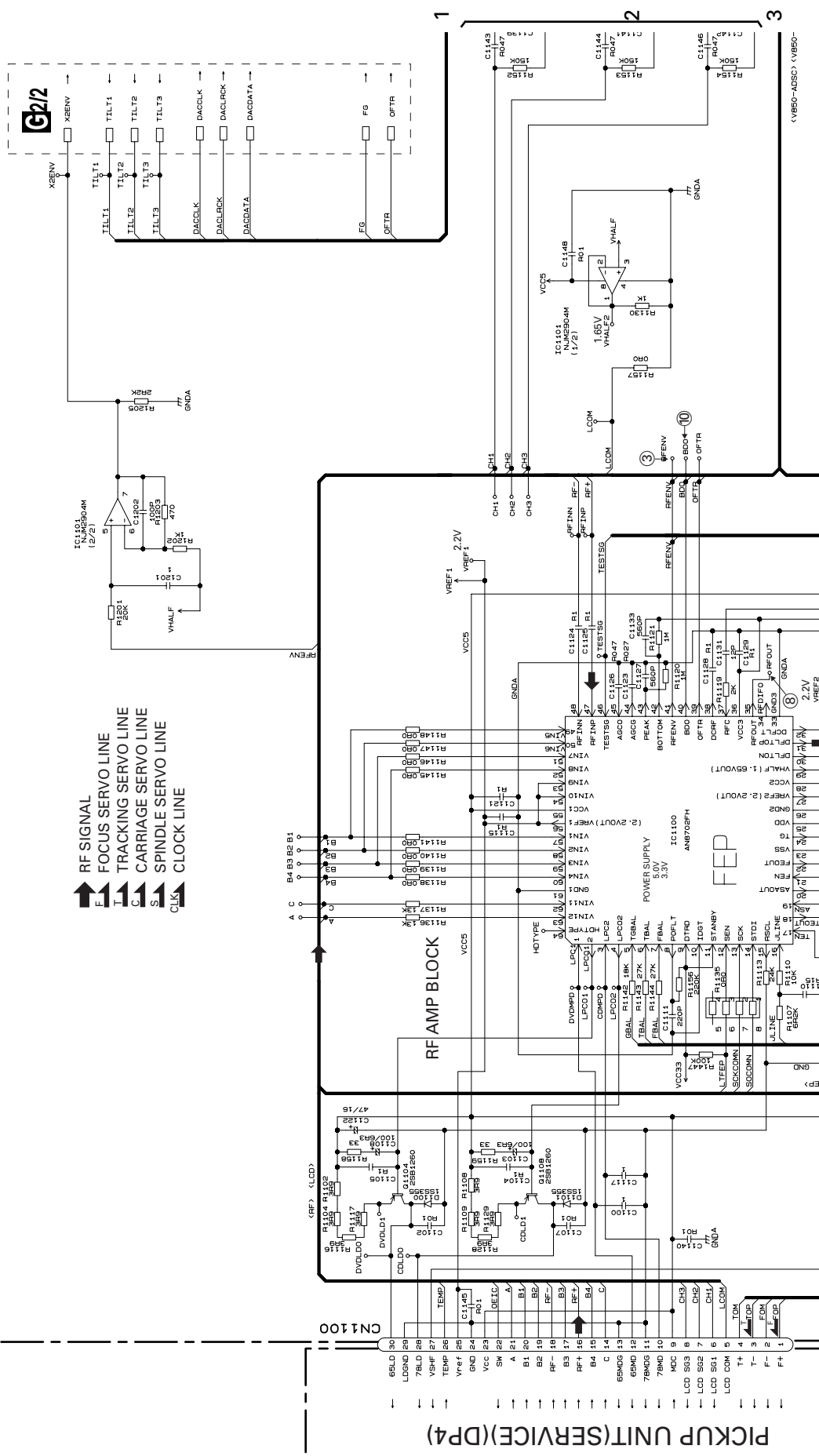


G-b 1/2

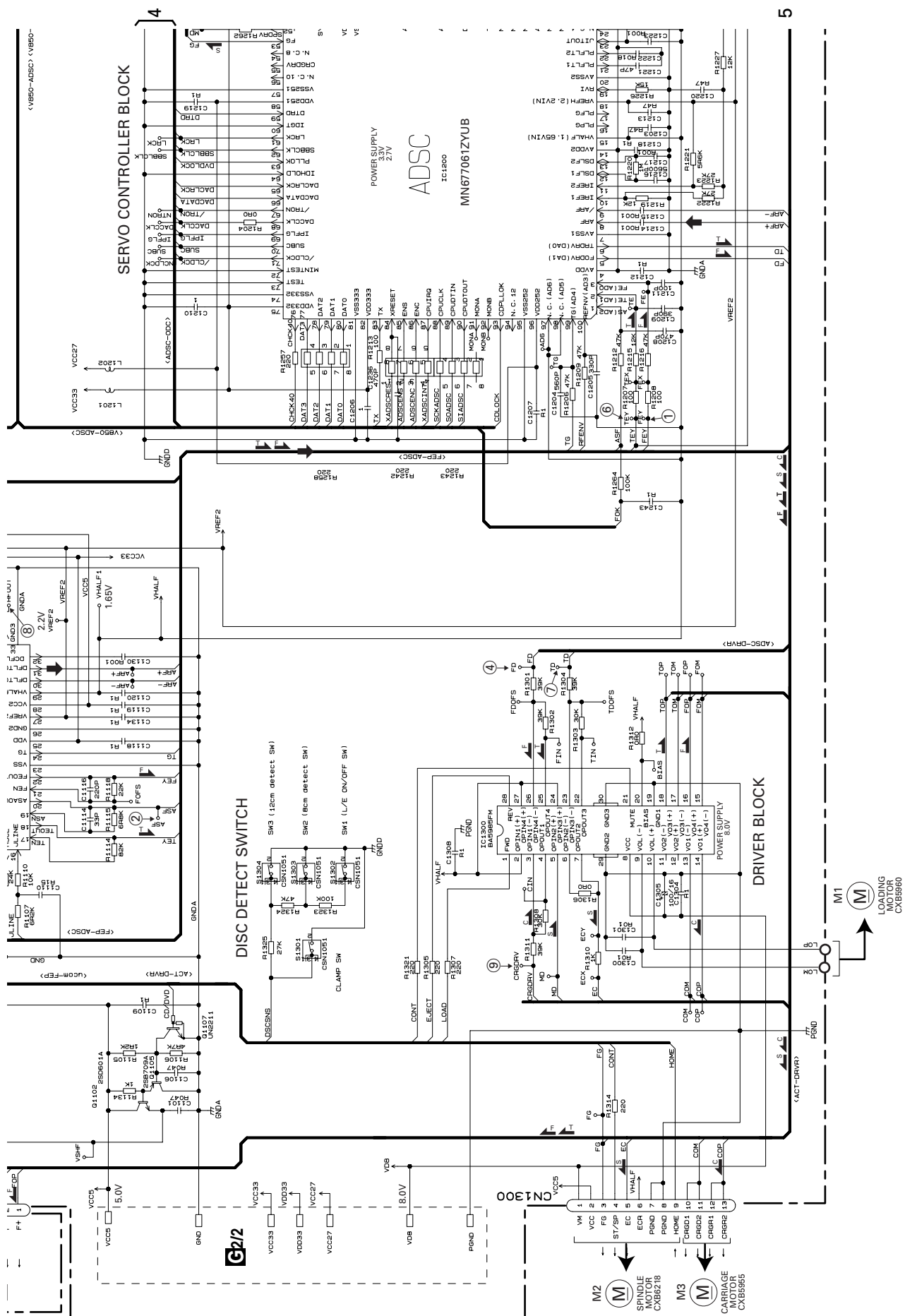


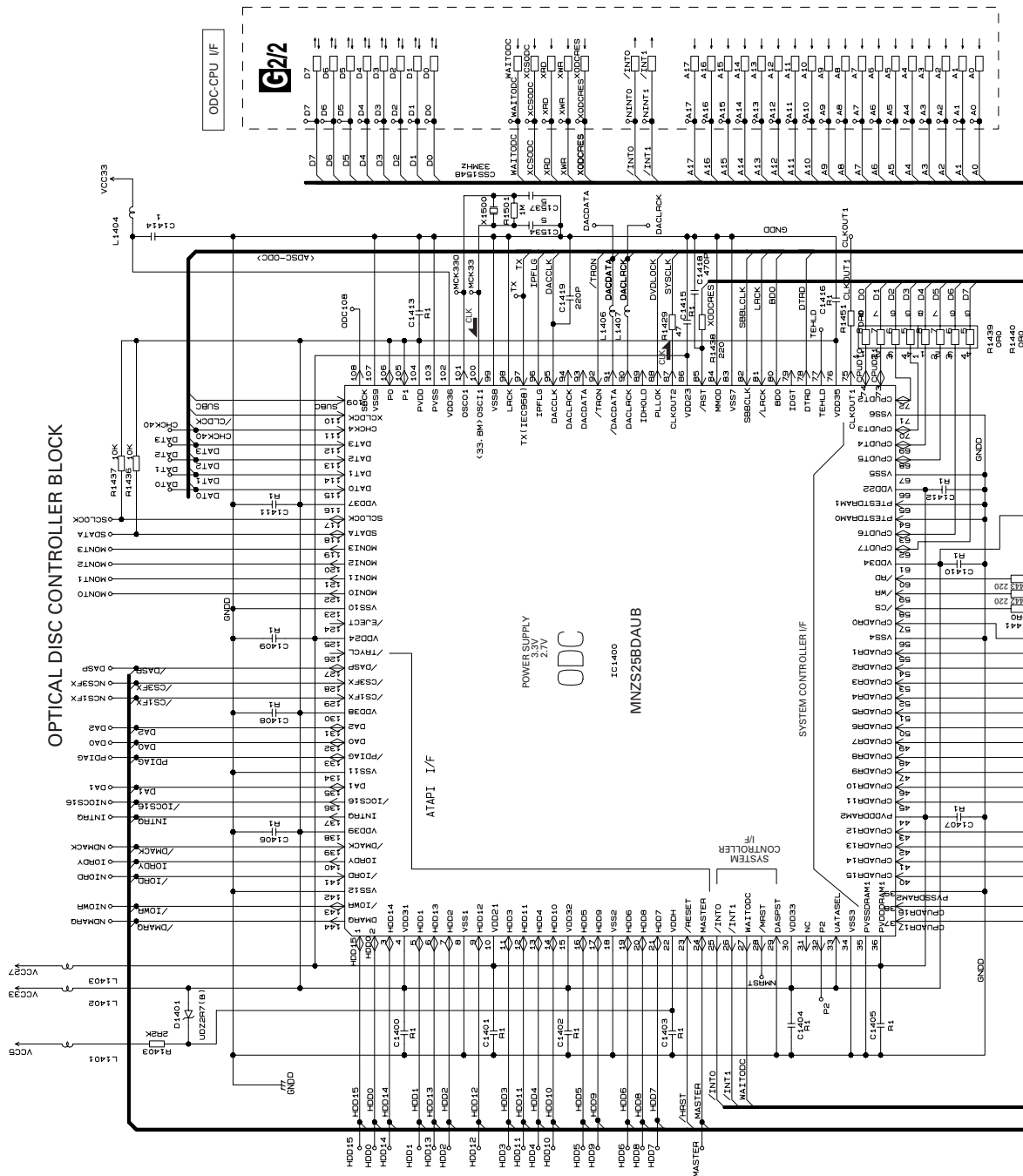
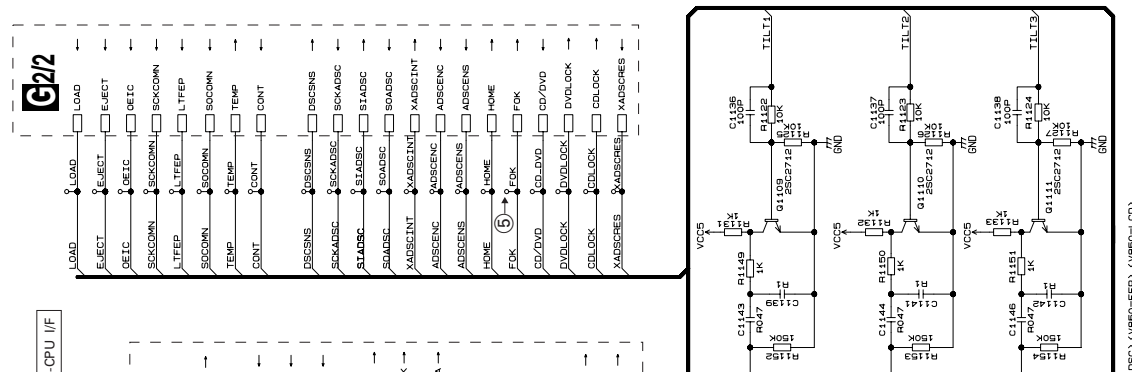
G^{1/2} DVD CORE UNIT R(FRONT END)

SERVO-CPU I/F



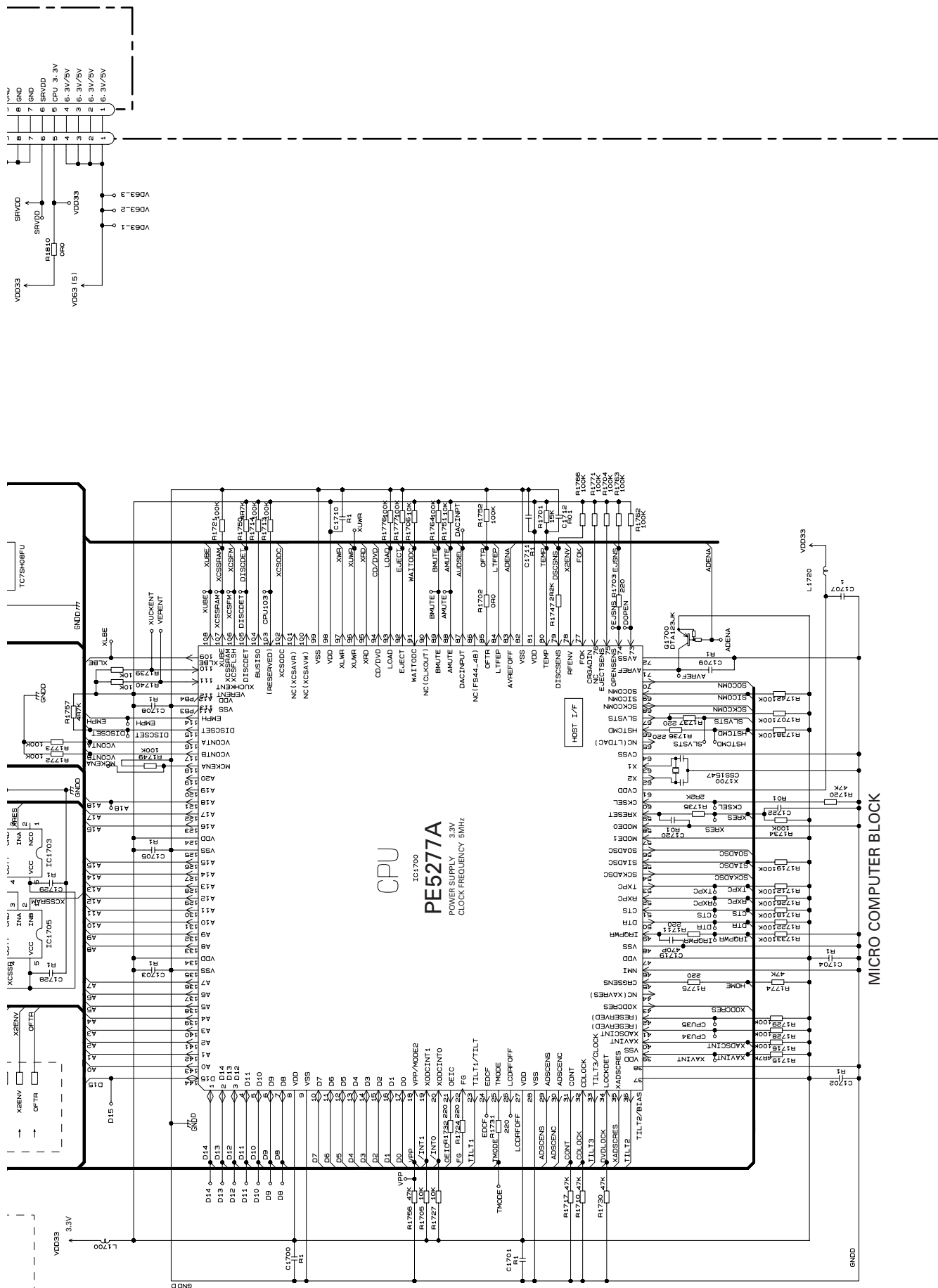
G-a G-b





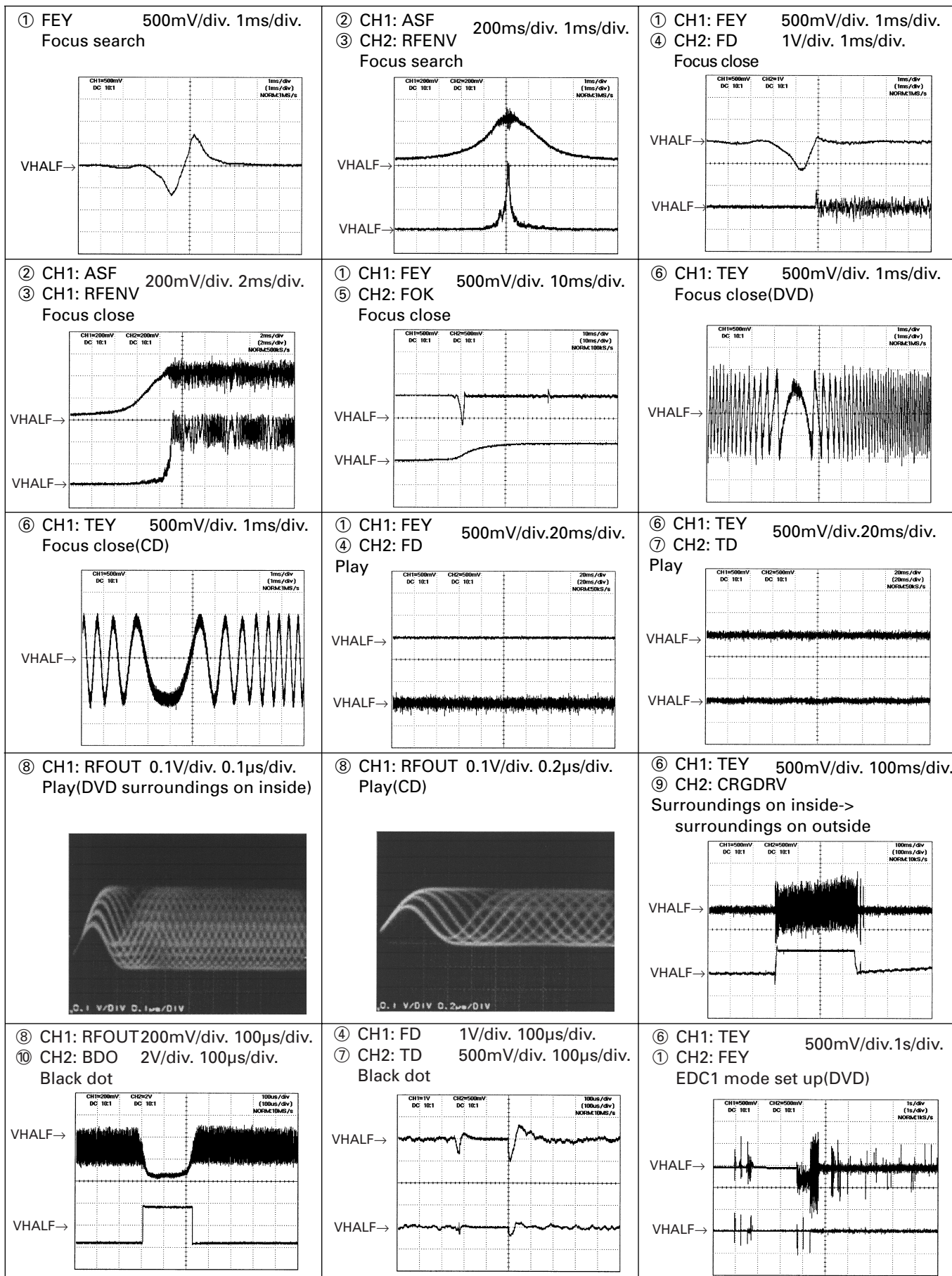


D



Waveforms

Note:1. The encircled number denote measuring pointes in the circuit diagram.
2. Reference voltage VHALF : 1.65V

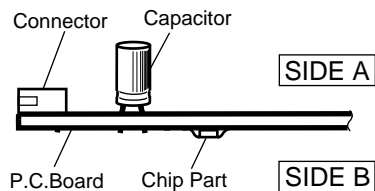


4. PCB CONNECTION DIAGRAM

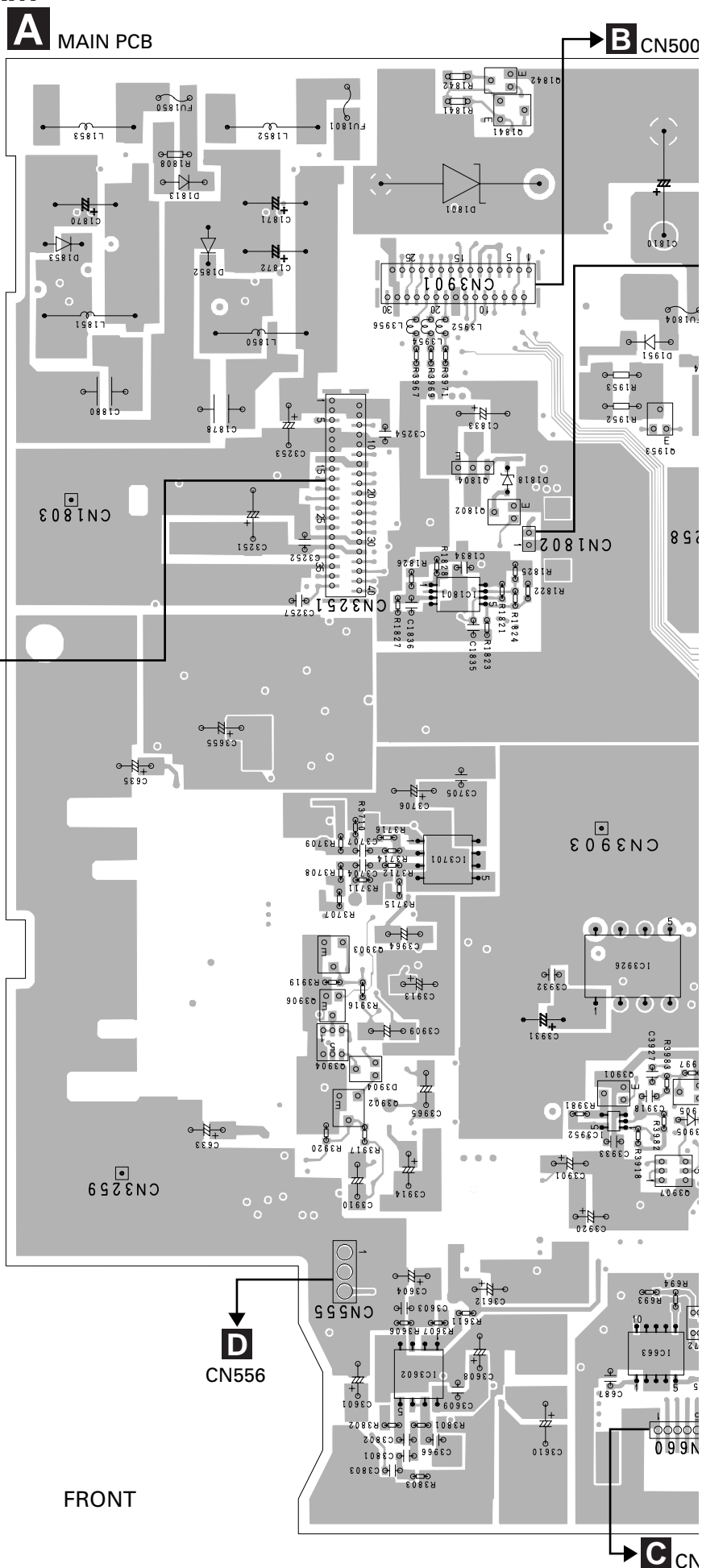
4.1 MAIN PCB

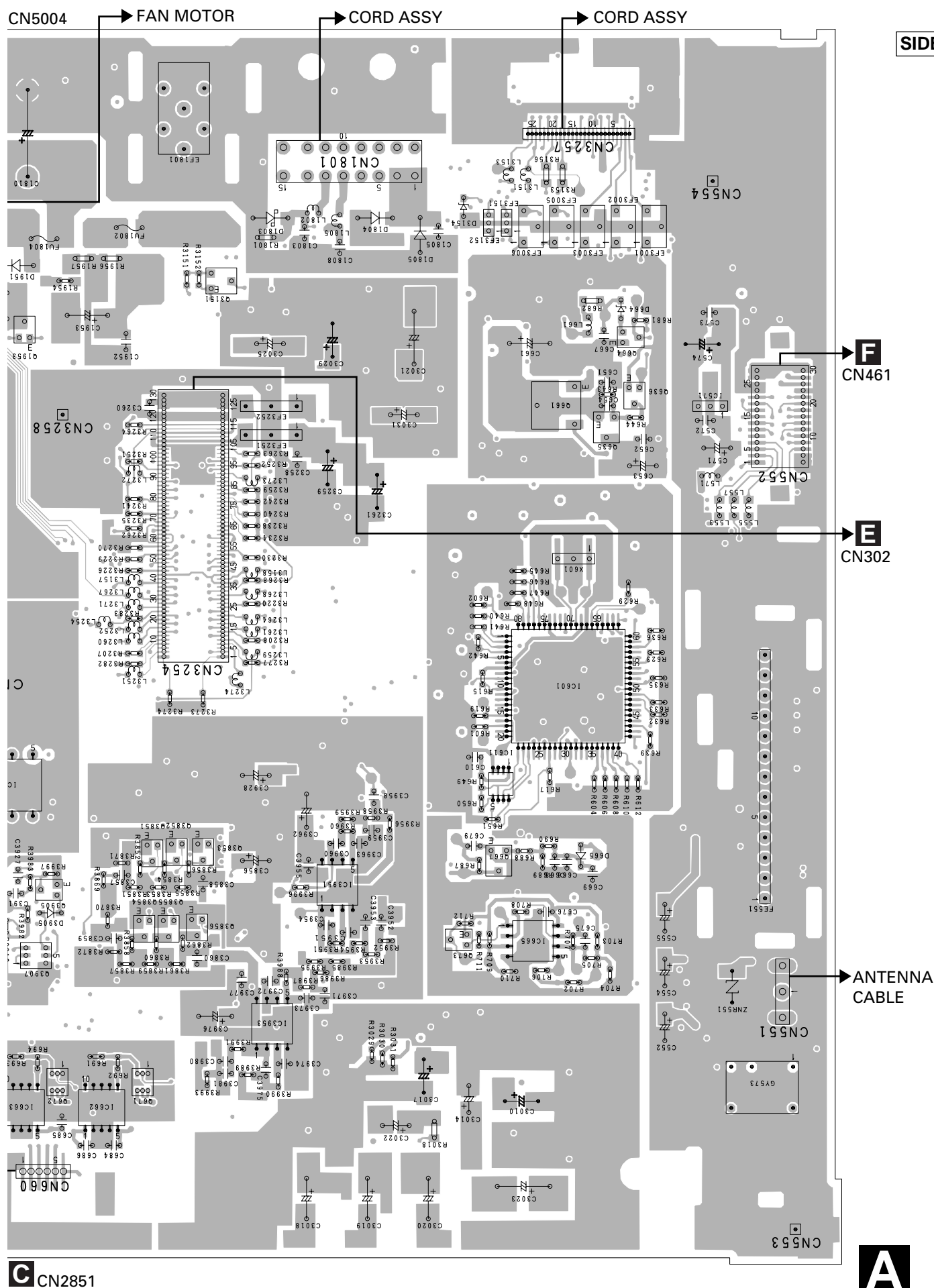
NOTE FOR PCB DIAGRAMS

1. The parts mounted on this PCB include all necessary parts for several destination.
2. Viewpoint of PCB diagrams

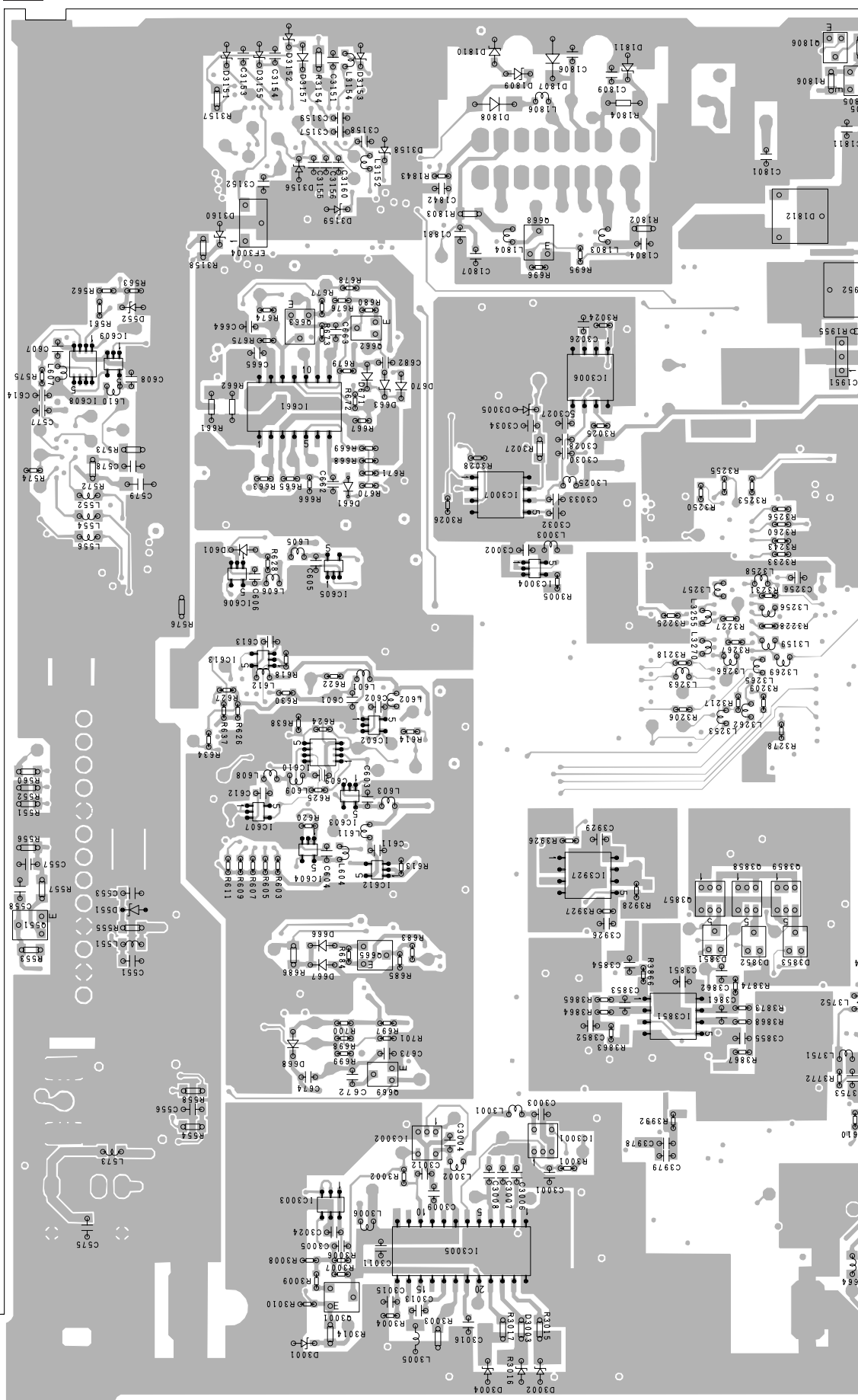


IC,Q	
Q1842	
Q1841	
Q3151	
Q1953	Q664
Q1804	
IC571	Q636
Q1802	Q661
Q1810	
IC1801	
IC601	
IC3701	
IC611	
Q3603	
IC3926	
Q3906	
Q3851	
Q3904	Q3853
Q3852	Q667
IC3951	Q3901
Q3905	Q3854
IC3952	Q3902
Q3855	Q3856
IC665	
Q673	
Q3907	
IC3953	
Q671	Q672
IC662	IC663
IC3602	





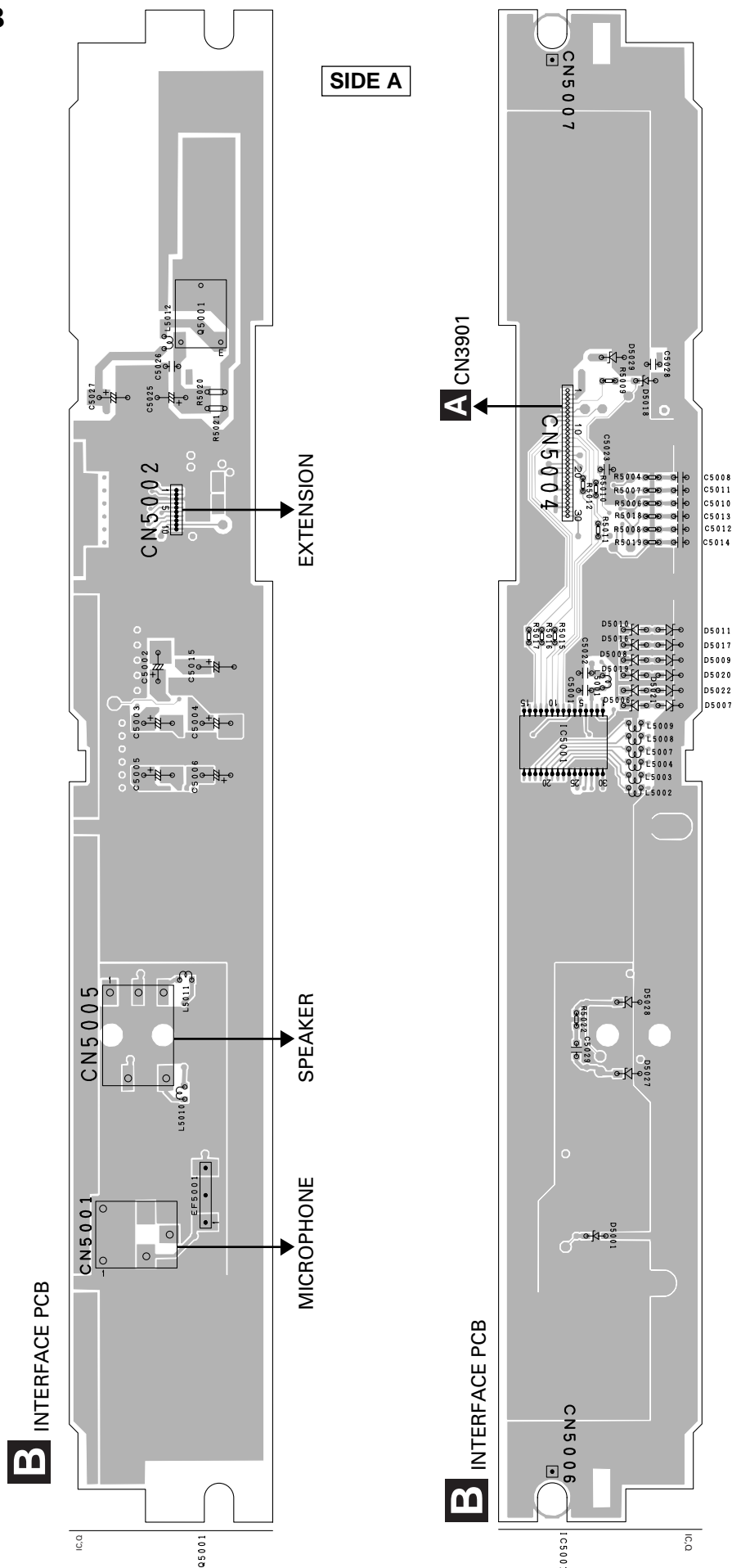
A MAIN PCB





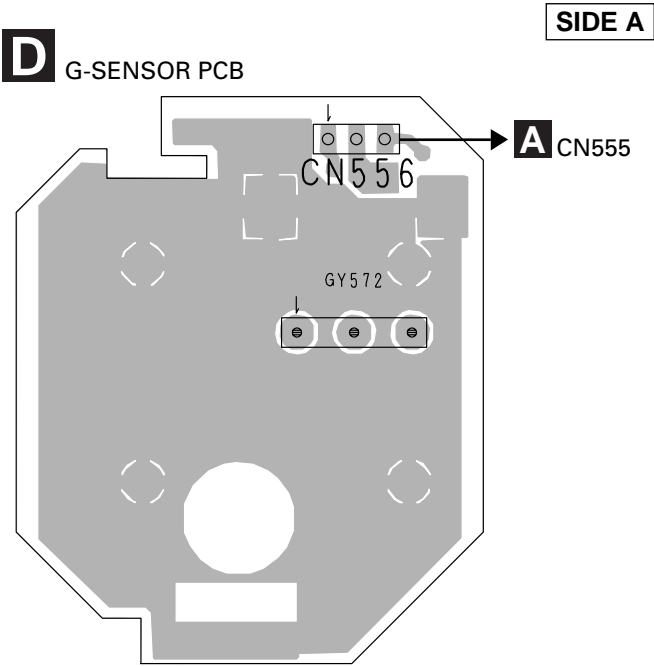
Q1806		
Q1805		
IC1851	IC1850	
Q668		
Q1952	Q1853	Q1852
Q663	IC609	
Q1951	Q662	
IC3006		
IC1951	IC608	
IC661		
Q1803		
IC3007		
IC3004	IC605	
IC606		
IC3651		
IC613		
IC602		
IC610		
IC603	IC607	
IC631	IC3901	
Q3859	Q3858	
IC3927	IC604	IC61
Q3857		
Q551		
Q665		
IC3753		
IC3851	IC3903	
IC3902		
IC3752		
Q669		
IC3002	IC3751	
IC3001		
IC3003		
Q670	Q675	
IC3005		
IC3601		
Q3001		

4.2 INTERFACE PCB

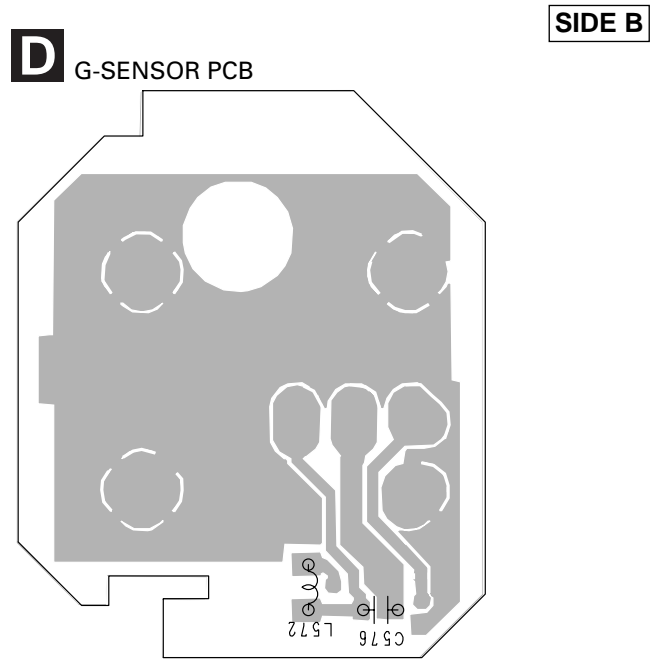


4.4 G-SENSOR PCB

A



B



C

D

SIDE A

A



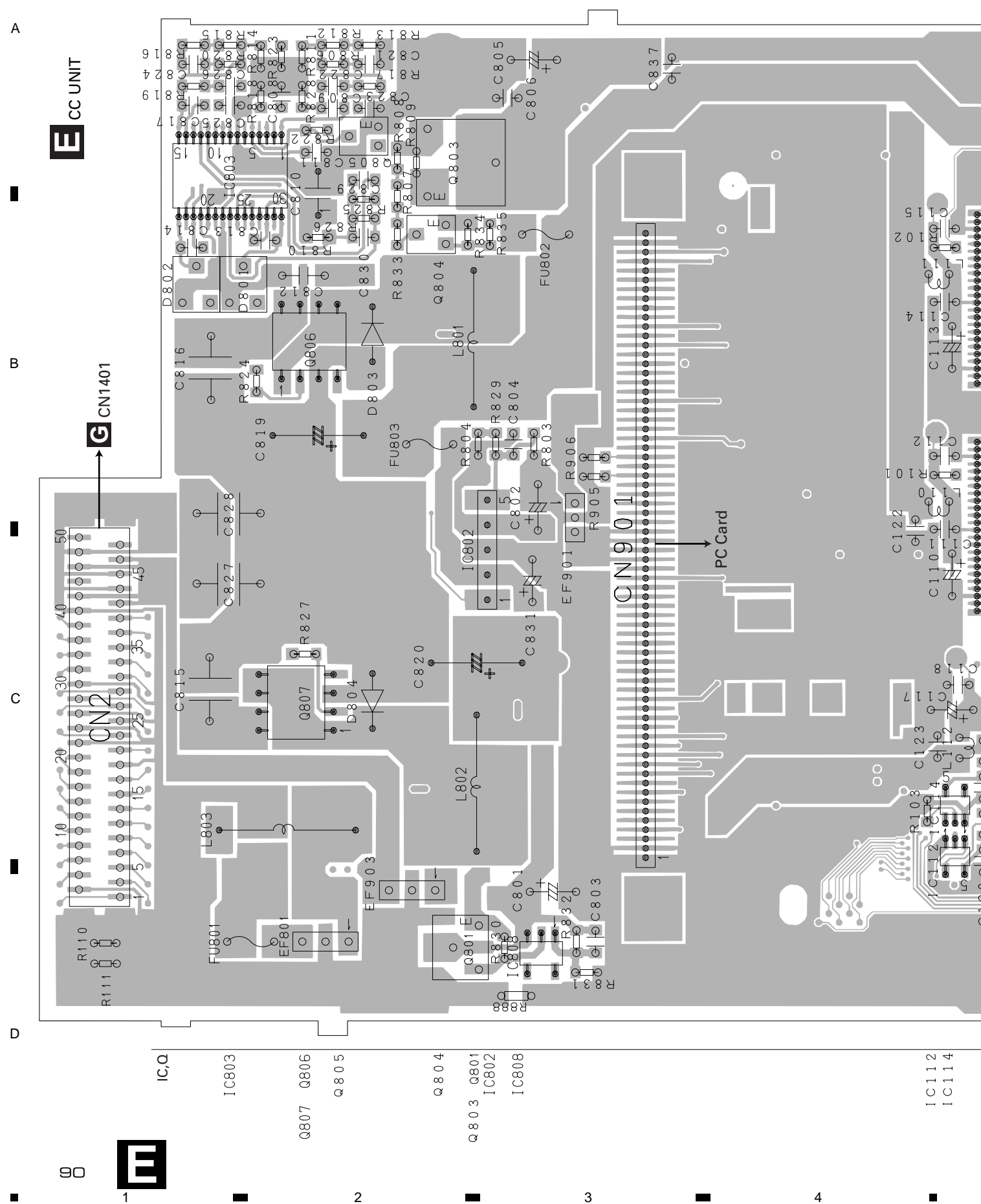
A CN552

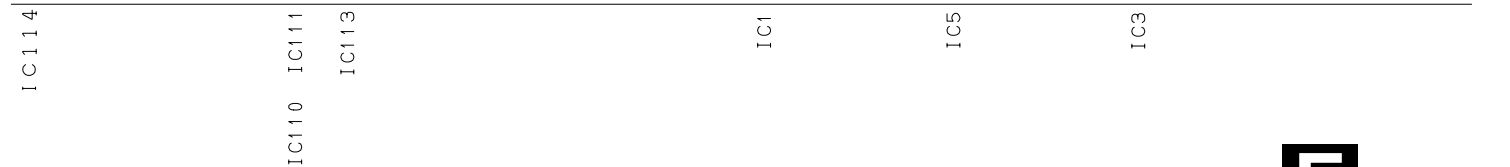
SIDE B

C

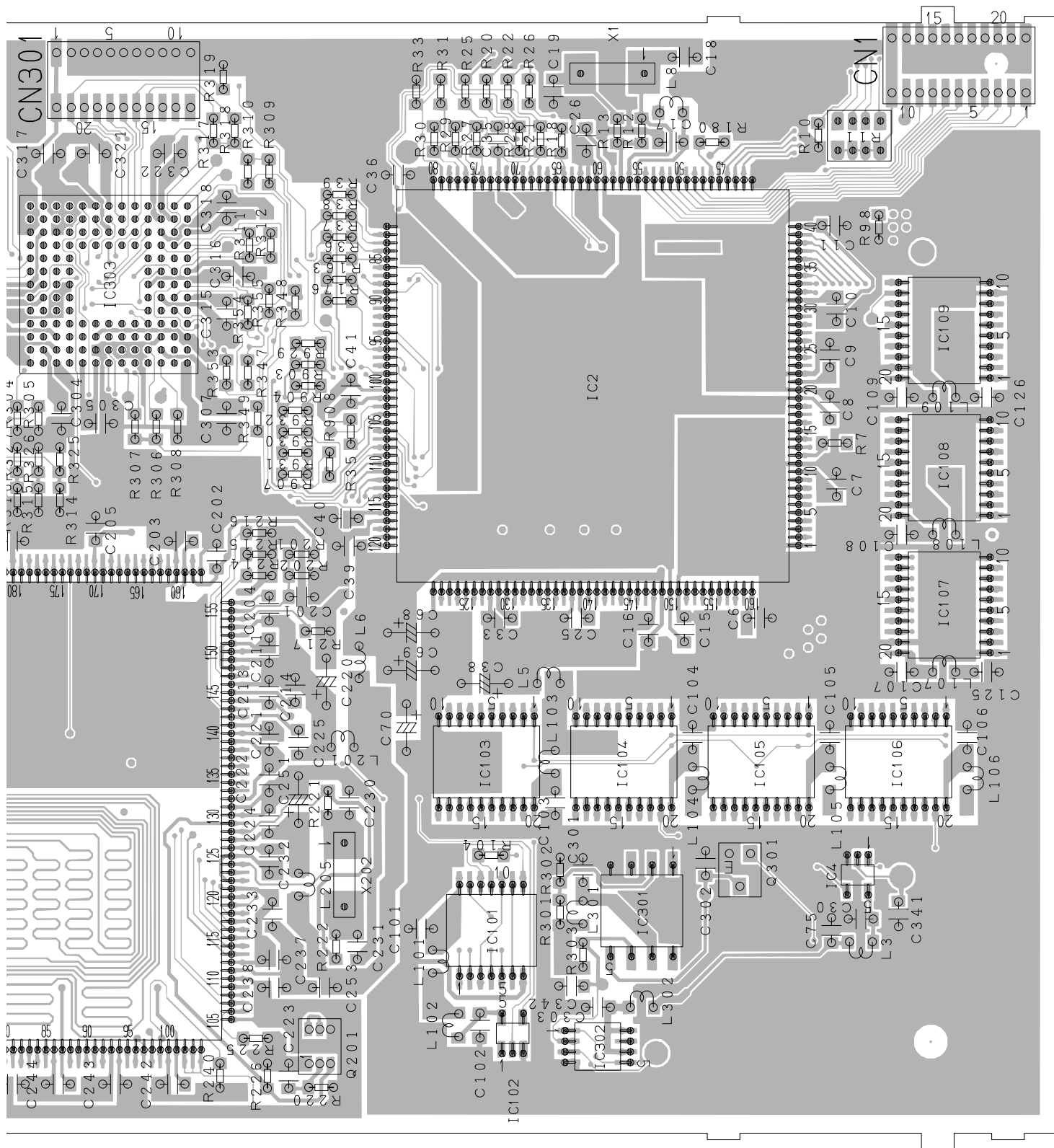


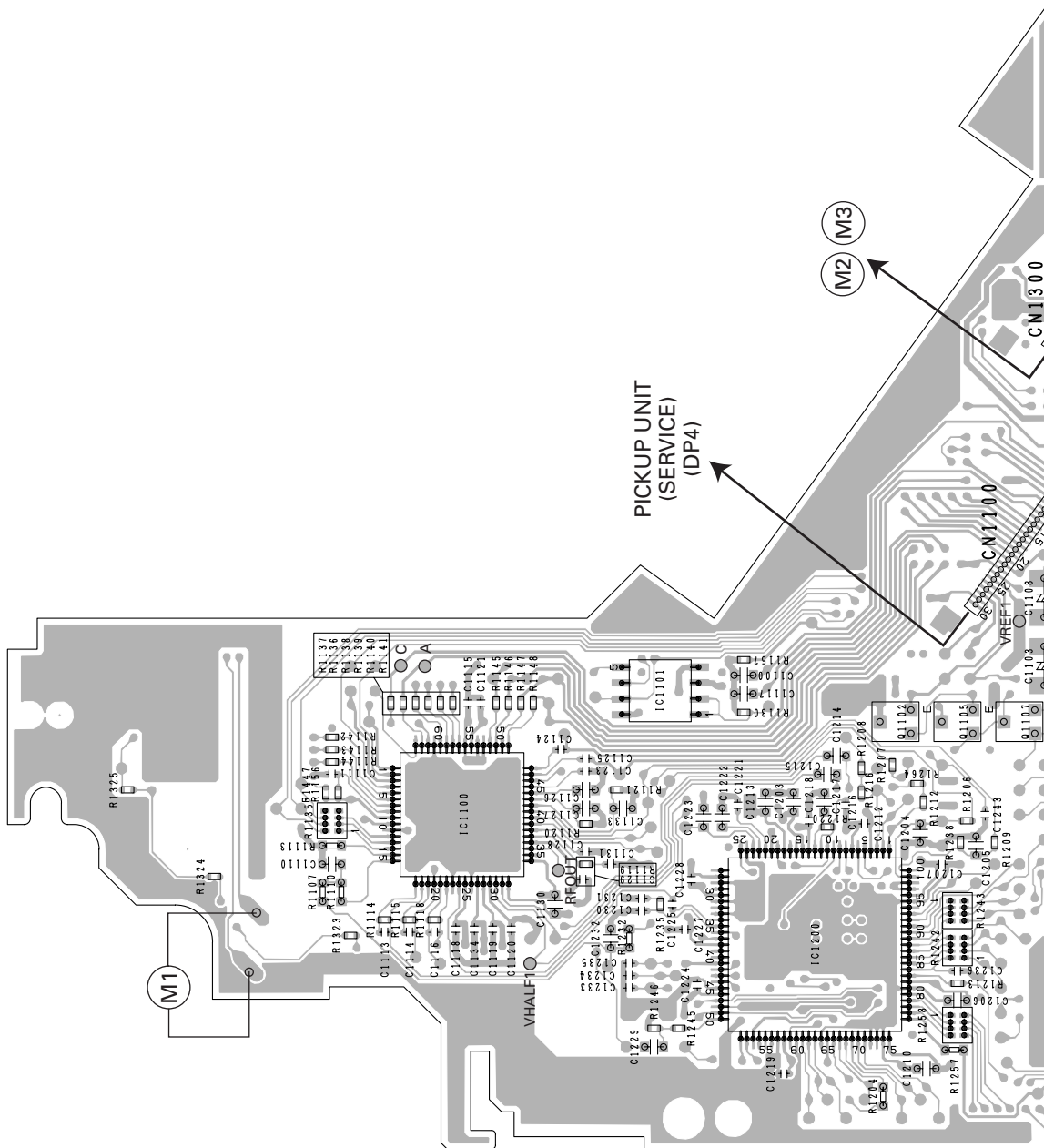
4.6 CC UNIT





SIDE B



G DVD CORE UNIT R



CN2

CN3251

A

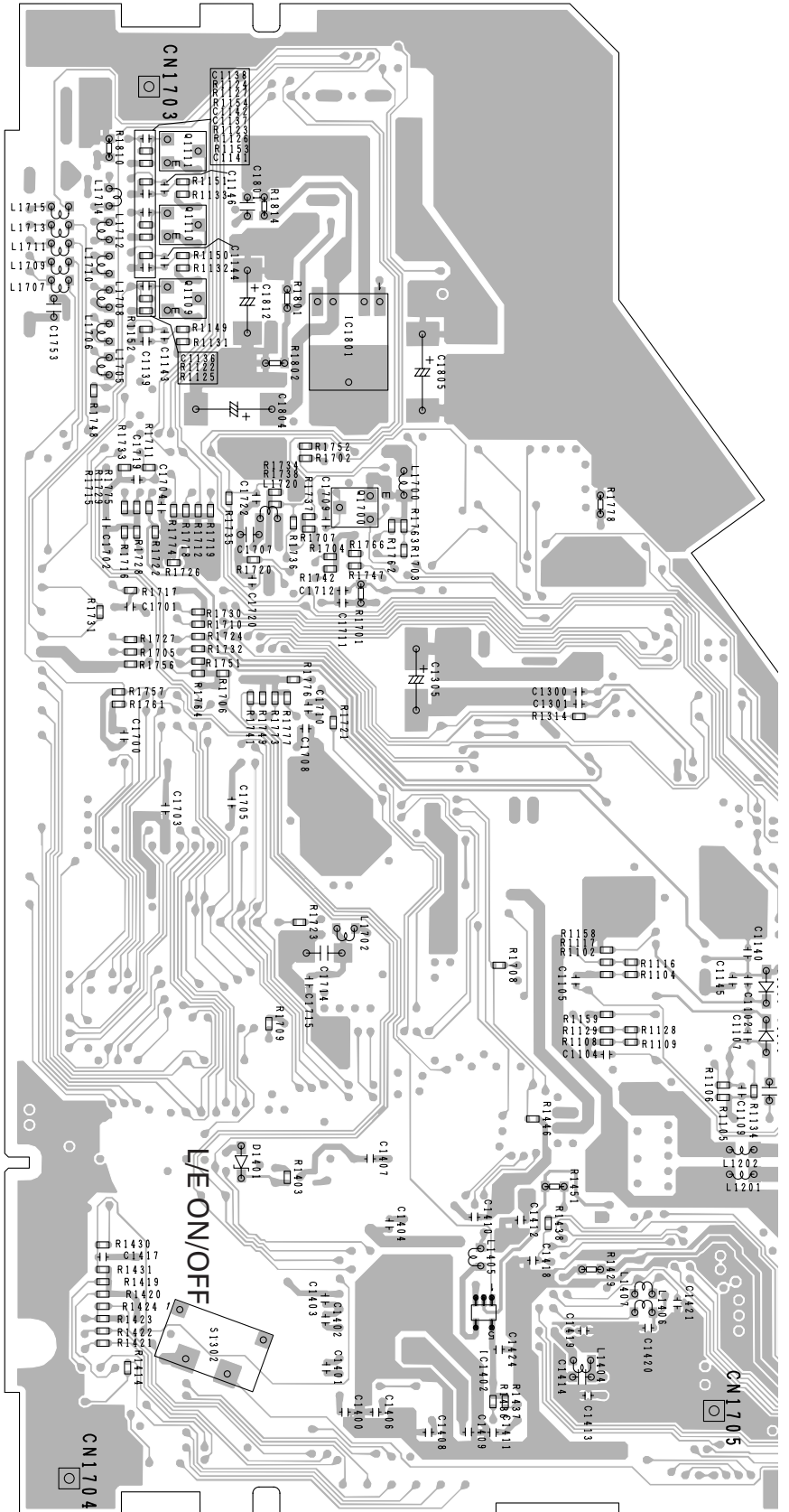
A

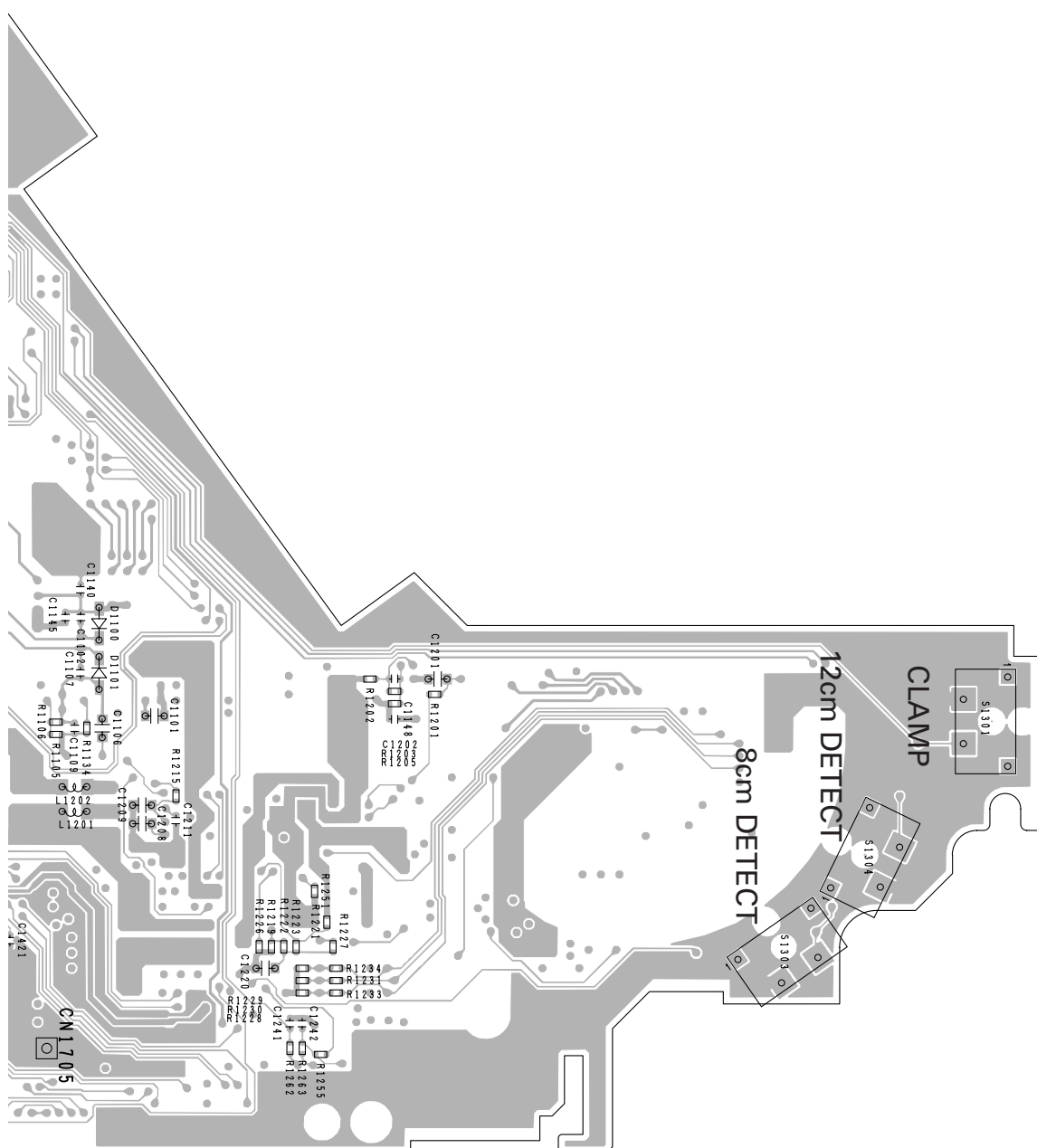
B

C

D

IC1402
Q1700
IC1801
Q1109
Q1110
Q1111





5. ELECTRICAL PARTS LIST

NOTE:

- Parts whose parts numbers are omitted are subject to being not supplied.
- The part numbers shown below indicate chip components.

Chip Resistor

RS1/○S○○○○J,RS1/○○S○○○○J

Chip Capacitor (except for CQS.....)

CKS....., CCS....., CSZS.....

====Circuit Symbol and No.==Part Name			Part No.	====Circuit Symbol and No.==Part Name			Part No.
E Unit Number : CWM7628				L 2	Inductor		CTF1558
Unit Name : CC Unit				L 3	Inductor		CTF1410
MISCELLANEOUS				L 5	Inductor		CTF1556
IC 1	IC	K4S281632C-TL1L		L 6	Inductor		CTF1295
IC 2	IC	UPD705103GM-180		L 7	Inductor		CTF1558
IC 3	IC	M2V2840ATP-7L		L 8	Inductor		CTF1556
IC 4	IC	TC7SZ08FU		L 101	Inductor		CTF1557
IC 5	IC	PD6336B		L 102	Inductor		CTF1557
				L 103	Inductor		CTF1557
				L 104	Inductor		CTF1557
IC 101	IC	TC74LCX08FT		L 105	Inductor		CTF1557
IC 102	IC	TC7SH04FU		L 106	Inductor		CTF1557
IC 103	IC	TC74LCX245FT		L 107	Inductor		CTF1557
IC 104	IC	TC74LCX245FT		L 108	Inductor		CTF1557
IC 105	IC	TC74LCX245FT		L 109	Inductor		CTF1557
IC 106	IC	TC74LCX245FT		L 110	Inductor		CTF1556
IC 107	IC	TC74LCX541FT		L 111	Inductor		CTF1556
IC 108	IC	TC74LCX541FT		L 112	Inductor		CTF1556
IC 109	IC	TC74LCX541FT		L 113	Inductor		CTF1557
IC 110	IC	PD6349C		L 114	Inductor		CTF1557
IC 111	IC	PD6350C		L 201	Inductor		CTF1556
IC 112	IC	TC7SH00FU		L 203	Inductor		CTF1556
IC 113	IC	M5M5V216ATP-70HI		L 204	Inductor		CTF1488
IC 114	IC	TC7SH08FU		L 205	Inductor		CTF1556
IC 201	IC	MB86291PFVS-G-DL		L 206	Inductor		CTF1556
IC 301	IC	M51957BFP		L 207	Inductor		CTF1379
IC 302	IC	TC7WH08FU		L 301	Inductor		CTF1557
IC 304	IC	PCM1725U		L 302	Inductor		CTF1557
IC 305	IC	PCM1801U		L 305	Inductor		CTF1556
IC 309	IC	TC7SH08FU		L 306	Inductor		CTF1556
IC 802	IC	LP3965ES-ADJ		L 307	Inductor		CTF1556
IC 803	IC	TPS5102IDBT		L 312	Inductor		CTF1410
IC 901	IC	TC74VHCT541AFT		L 801	Inductor		CTH1257
IC 902	IC	TC74VHCT541AFT		L 802	Inductor		CTH1257
IC 903	IC	TC74VHCT541AFT		L 803	Inductor		CTH1253
IC 904	IC	TC74VHCT541AFT		L 901	Inductor		CTF1410
IC 905	IC	TC74LVX4245FS		L 902	Inductor		CTF1410
IC 906	IC	TC74LVX4245FS		L 903	Inductor		CTF1410
IC 907	IC	TC74LVX4245FS		L 904	Inductor		CTF1410
IC 908	IC	TC74VHC541FT		L 905	Inductor		CTF1410
Q 201	Transistor	UMD2N		L 906	Inductor		CTF1410
Q 301	Transistor	DTC114EU		L 907	Inductor		CTF1410
Q 803	Transistor	2SA1834F5		L 908	Inductor		CTF1410
Q 804	Transistor	2SC4081		L 909	Inductor		CTF1410
Q 805	Transistor	DTC114EU		L 910	Inductor		CTF1410
Q 806	FET	RK4936		L 911	Inductor		CTF1410
Q 807	FET	RK4936		TH 153	Thermistor		CCX1056
Q 901	Transistor	2SA1797		X 1	Radiator 30.0MHz		CSS1563
Q 902	Transistor	2SC2712		X 2	Radiator 33.0MHz		CSS1564
Q 903	Transistor	DTA114EU		X 3	Radiator 33.86MHz		CSS1551
D 801	Diode	RB400D		X 202	Radiator 14.31818MHz		CSS1562
D 802	Diode	RB400D		FU 801	Fuse 4A		CEK1199
D 803	Diode	RB060L-40		FU 802	Fuse 2.5A		CEK1209
D 804	Diode	RB060L-40		FU 803	Fuse 2.5A		CEK1209
L 1	Inductor	CTF1558		EF 801	EMI Filter		CCG1083

====Circuit Symbol and No.==Part Name			Part No.	====Circuit Symbol and No.==Part Name			Part No.
EF	901	EMI Filter	CCG1104	R	67		RS1/16S101J
EF	902	EMI Filter	CCG1083	R	68		RS1/16S101J
EF	903	EMI Filter	CCG1083	R	69		RS1/16S101J
RESISTORS				R	70		RS1/16S101J
				R	71		RS1/16S101J
R	2		RS1/16S0R0J	R	72		RS1/16S101J
R	4		RS1/16S0R0J	R	73		RS1/16S101J
R	5		RS1/16S473J	R	74		RS1/16S101J
R	6		RS1/16S473J	R	75		RS1/16S101J
R	7		RS1/16S220J	R	76		RS1/16S101J
R	8		RS1/16S473J	R	77		RS1/16S101J
R	9		RS1/16S473J	R	78		RS1/16S101J
R	10		RS1/16S104J	R	79		RS1/16S101J
R	11		RAB4C473J	R	80		RS1/16S101J
R	12		RS1/16S105J	R	81		RS1/16S101J
R	13		RS1/16S151J	R	82		RS1/16S101J
R	15		RS1/16S0R0J	R	83		RS1/16S102J
R	17		RS1/16S0R0J	R	84		RS1/16S562J
R	18		RS1/16S0R0J	R	85		RS1/16S103J
R	19		RS1/16S473J	R	87		RS1/16S104J
R	20		RS1/16S101J	R	88		RS1/16S104J
R	21		RS1/16S101J	R	89		RS1/16S0R0J
R	22		RS1/16S101J	R	90		RS1/16S0R0J
R	23		RS1/16S105J	R	93		RS1/16S153J
R	24		RS1/16S151J	R	94		RS1/16S153J
R	25		RS1/16S101J	R	95		RS1/16S153J
R	26		RS1/16S101J	R	96		RS1/16S153J
R	27		RS1/16S101J	R	97		RS1/16S473J
R	28		RS1/16S101J	R	98		RS1/16S473J
R	29		RS1/16S101J	R	101		RS1/16S473J
R	30		RS1/16S101J	R	102		RS1/16S473J
R	31		RS1/16S101J	R	103		RS1/16S473J
R	32		RS1/16S473J	R	104		RS1/16S220J
R	33		RS1/16S473J	R	110		RS1/16S0R0J
R	34		RS1/16S105J	R	154		RS1/16S473J
R	35		RS1/16S104J	R	155		RS1/16S473J
R	36		RS1/16S101J	R	156		RS1/16S473J
R	37		RS1/16S101J	R	157		RS1/16S473J
R	38		RS1/16S101J	R	158		RS1/16S473J
R	39		RS1/16S101J	R	159		RS1/16S473J
R	40		RS1/16S0R0J	R	160		RS1/16S473J
R	41		RS1/16S0R0J	R	161		RS1/16S103J
R	42		RS1/16S0R0J	R	162		RS1/16S473J
R	43		RS1/16S0R0J	R	163		RS1/16S560J
R	44		RS1/16S0R0J	R	166		RS1/16S473J
R	45		RS1/16S104J	R	176		RS1/16S0R0J
R	46		RS1/16S104J	R	180		RS1/16S220J
R	47		RS1/16S104J	R	201		RN1/16SE1502D
R	48		RS1/16S104J	R	202		RN1/16SE1202D
R	49		RS1/16S104J	R	210		RS1/16S104J
R	50		RS1/16S104J	R	211		RS1/16S104J
R	51		RS1/16S101J	R	212		RS1/16S104J
R	52		RS1/16S101J	R	213		RS1/16S104J
R	53		RS1/16S101J	R	217		RS1/16S272J
R	54		RS1/16S101J	R	220		RS1/16S223J
R	55		RS1/16S101J	R	221		RS1/16S105J
R	57		RS1/16S101J	R	222		RS1/16S151J
R	59		RS1/16S101J	R	224		RS1/16S0R0J
R	60		RS1/16S101J	R	225		RS1/16S104J
R	61		RS1/16S0R0J	R	226		RS1/16S104J
R	62		RS1/16S101J	R	227		RS1/16S104J
R	63		RS1/16S101J	R	228		RS1/16S104J
R	64		RS1/16S101J	R	229		RS1/16S560J
R	65		RS1/16S101J	R	230		RS1/16S104J
R	66		RS1/16S101J	R	232		RS1/16S104J

====Circuit Symbol and No.==Part Name	Part No.	====Circuit Symbol and No.==Part Name	Part No.
R 237	RS1/16S104J	R 925	RS1/16S473J
R 238	RS1/16S330J	R 926	RS1/16S101J
R 240	RS1/16S104J	R 927	RS1/16S101J
R 301	RS1/16S123J	R 929	RS1/16S104J
R 302	RS1/16S103J	R 930	RS1/16S104J
R 303	RS1/16S473J	R 931	RS1/16S104J
R 320	RS1/16S201J	R 932	RS1/16S104J
R 329	RS1/16S221J	R 933	RS1/16S270J
R 330	RS1/16S221J	R 934	RS1/16S103J
R 331	RS1/16S221J	R 935	RS1/16S472J
R 332	RS1/16S221J	R 936	RS1/16S103J
R 333	RS1/16S221J	R 937	RS1/16S270J
R 334	RS1/16S221J	R 938	RS1/16S270J
R 335	RS1/16S221J	R 939	RS1/16S270J
R 336	RS1/16S221J		
R 349	RS1/16S473J	CAPACITORS	
R 803	RN1/16SE1002D	C 1	CKSRYB104K16
R 804	RN1/16SE3901D	C 2	CKSRYB104K16
R 806	RS1/16S101J	C 3	CKSRYB104K16
R 807	RS1/16S330J	C 4	CKSRYB104K16
		C 5	CKSRYB104K16
R 808	RS1/16S330J		
R 809	RS1/16S102J	C 6	CKSRYB104K16
R 810	RS1/16S100J	C 7	CKSRYB104K16
R 811	RN1/16SE1001D	C 8	CKSRYB104K16
R 812	RN1/16SE1501D	C 9	CKSRYB104K16
		C 10	CKSRYB104K16
R 813	RN1/16SE3300D		
R 814	RN1/16SE1001D	C 11	CKSRYB104K16
R 815	RN1/16SE3001D	C 12	CSZSQ100M6R3
R 816	RN1/16SE3300D	C 13	CKSRYB104K16
R 817	RS1/16S332J	C 14	CKSRYB104K16
		C 15	CKSRYB104K16
R 818	RS1/16S473J		
R 819	RS1/16S102J	C 16	CKSRYB104K16
R 820	RS1/16S101J	C 17	CKSRYB104K16
R 822	RS1/16S473J	C 18	CCSRCH100D50
R 823	RS1/16S104J	C 19	CCSRCH100D50
		C 20	CKSRYB104K16
R 824	RS1/16S150J		
R 825	RS1/16S224J	C 21	CKSRYB104K16
R 826	RS1/16S224J	C 22	CKSRYB104K16
R 827	RS1/16S150J	C 23	CKSRYB104K16
R 828	RS1/16S104J	C 24	CKSRYB104K16
		C 25	CKSRYB104K16
R 829	RN1/16SE6801D		
R 833	RS1/16S330J	C 26	CKSRYB104K16
R 834	RS1/16S102J	C 27	CSZSQ100M6R3
R 835	RS1/16S392J	C 28	CKSRYB104K16
R 903	RS1/16S101J	C 29	CKSRYB104K16
		C 30	CKSRYF104Z25
R 904	RS1/16S101J		
R 905	RS1/16S101J	C 31	CCSRCH5R0D50
R 906	RS1/16S101J	C 32	CCSRCH5R0D50
R 907	RS1/16S101J	C 33	CKSRYB104K16
R 908	RS1/16S101J	C 35	CKSRYB104K16
		C 36	CKSRYB104K16
R 910	RAB4C101J		
R 911	RAB4C101J	C 38	CSZS100M10
R 912	RAB4C101J	C 39	CKSRYB104K16
R 913	RAB4C101J	C 40	CKSRYB104K16
R 914	RAB4C101J	C 41	CKSRYB104K16
		C 42	CKSRYB104K16
R 915	RAB4C101J		
R 916	RAB4C101J	C 44	CKSRYB104K16
R 917	RAB4C101J	C 47	CKSRYB104K16
R 918	RAB4C101J	C 49	CKSRYB104K16
R 919	RAB4C101J	C 54	CCSRCH121J50
		C 55	CKSRYB104K16
R 920	RAB4C101J		
R 921	RAB4C101J	C 57	CKSRYB104K16
R 922	RAB4C101J	C 60	CKSRYB104K16
R 923	RAB4C473J	C 63	CKSRYB104K16
R 924	RS1/16S473J	C 64	CKSRYB104K16
		C 66	CKSRYB104K16

====Circuit Symbol and No.====Part Name	Part No.	====Circuit Symbol and No.====Part Name	Part No.
C 67	CSZSQ100M6R3	C 234	CKSBYB104K16
C 68	CSZS330M6R3	C 235	CKSBYB104K16
C 69	CSZS330M6R3	C 237	CKSBYB104K16
C 70	CSZS330M6R3	C 238	CKSBYB104K16
C 71	CKSBYF103Z50	C 239	CKSBYB104K16
C 72	CKSBYF103Z50	C 240	CKSBYB104K16
C 73	CKSBYF104Z25	C 241	CKSBYB104K16
C 74	CKSBYF104Z25	C 242	CKSBYB104K16
C 75	CKSBYF104Z25	C 243	CKSBYB104K16
C 76	CKSBYB104K16	C 244	CKSBYB104K16
C 78	CKSBYB104K16	C 245	CKSBYB104K16
C 79	CKSBYB104K16	C 246	CKSBYB104K16
C 101	CKSBYB104K16	C 247	CKSBYB104K16
C 102	CKSBYB104K16	C 248	CKSBYB104K16
C 103	CKSBYB104K16	C 249	CSZS100M10
C 104	CKSBYB104K16	C 250	CSZS100M10
C 105	CKSBYB104K16	C 251	CSZS100M10
C 106	CKSBYB104K16	C 252	CSZS100M10
C 107	CKSBYB104K16	C 253	CKSBYF104Z25
C 108	CKSBYB104K16	C 301	CKSBYF104Z25
C 109	CKSBYB104K16	C 302	CKSBYB334K10
C 110	CSZSQ100M6R3	C 303	CKSBYF104Z25
C 111	CKSBYB104K16	C 306	CKSBYF104Z25
C 112	CKSBYF224Z16	C 323	CSZS100M10
C 113	CSZSQ100M6R3	C 324	CKSBYB104K16
C 114	CKSBYB104K16	C 327	CSZS100M10
C 115	CKSBYF224Z16	C 328	CKSBYB104K16
C 116	CKSBYF104Z25	C 329	CSZS100M10
C 117	CSZSQ100M6R3	C 330	CSZS4R7M10
C 118	CKSBYB104K16	C 331	CSZS4R7M10
C 119	CKSBYF104Z25	C 332	CKSBYB104K16
C 120	CKSBYF104Z25	C 339	CSZS100M10
C 121	CKSBYF104Z25	C 341	CCSRCH101J50
C 122	CKSBYF104Z25	C 342	CKSBYF104Z25
C 123	CKSBYF103Z50	C 343	CKSBYB102K50
C 124	CCSRCH101J50	C 802	CSZSR101M6R3
C 125	CKSBYF104Z25	C 804	CCSRCH680J50
C 126	CKSBYF104Z25	C 805	CSZSR101M6R3
C 201	CKSBYB104K16	C 806	CKSBYB104K16
C 202	CKSBYB104K16	C 808	CKSBYB105K10
C 203	CKSBYB104K16	C 809	CCSRCH101J50
C 204	CKSBYB104K16	C 810	CCG1111
C 205	CKSBYB104K16	C 811	CCSRCH470J50
C 206	CKSBYB104K16	C 812	CKSBYB475K10
C 207	CKSBYB104K16	C 813	CKSBYF474Z16
C 208	CKSBYB104K16	C 814	CKSBYF474Z16
C 209	CKSBYB104K16	C 815	CCG1150
C 211	CKSBYB104K16	C 816	CCG1150
C 213	CKSBYB104K16	C 817	CCSRCH221J50
C 214	CKSBYB104K16	C 819	CCH1366
C 215	CKSBYB104K16	C 820	CCH1366
C 216	CKSBYB104K16	C 821	CKSBYB682K50
C 217	CKSBYB104K16	C 822	CKSBYB224K10
C 220	CSZS100M10	C 823	CKSBYB103K25
C 221	CKSBYB104K16	C 824	CKSBYB223K25
C 222	CKSBYB104K16	C 825	CKSBYB103K25
C 223	CKSBYB224K10	C 826	CKSBYB104K16
C 224	CKSBYB104K16	C 827	CCG1150
C 225	CKSBYB104K16	C 828	CCG1150
C 227	CKSBYB104K16	C 829	CKSBYF104Z25
C 228	CKSBYB104K16	C 830	CKSBYF104Z25
C 230	CCSRCH150J50	C 831	CSZS100M6R3
C 231	CCSRCH120J50	C 832	CKSBYF103Z50
C 232	CKSBYB104K16	C 833	CKSBYF104Z25
C 233	CKSBYB104K16	C 834	CKSBYF103Z50

102

====Circuit Symbol and No.====Part Name	Part No.	====Circuit Symbol and No.====Part Name	Part No.
C 406	CCSRUJ220J50	C 541	CCSRCH561J50
C 407	CKSSYB333K16	C 542	CKSSYB104K10
C 408	CKSSYB182K50	C 543	CSZS100M6R3
C 409	CSZS100M6R3	C 544	CCSRCH331J50
C 410	CKSSYB103K16	C 545	CKSSYB104K10
C 411	CKSSYB102K50	<div> Main Unit Consists of Main PCB Interface PCB Grille PCB G-Sensor PCB </div>	
C 412	CKSSYB102K50		
C 413	CKSSYB104K10		
C 414	CKSSYB104K10		
C 415	CKSSYB104K10		
C 416	CKSSYB104K10	<div> A B C D Unit Number : CWM7680 Unit Name : Main Unit </div>	
C 417	CKSSYB104K10		
C 418	CKSSYB102K50	MISCELLANEOUS	
C 419	CKSSYB104K10		
C 420	CKSSYB104K10	IC 571	IC S-81250SGUP
C 421	CKSSYB102K50	IC 601	IC PE5228A
C 422	CKSSYB103K16	IC 602	IC TC7SET08FU
C 423	CKSSYB104K10	IC 603	IC TC7SET08FU
C 424	CCSRCH102J50	IC 604	IC TC7SH08FU
C 425	CCSRCH271J50	IC 605	IC TC7SH08FU
C 426	CCSRCH102J50	IC 606	IC TC7S14FU
C 427	CKSSYB104K10	IC 607	IC TC7SET08FU
C 428	CKSSYB103K16	IC 608	IC TC7W32FU
C 429	CCSRCH301J50	IC 609	IC TC7SH04FU
C 430	CCSSCH120J50	IC 610	IC TC7W126FU
C 431	CCSRCH301J50	IC 612	IC TC7SET08FU
C 432	CKSSYB103K16	IC 613	IC TC7SET08FU
C 433	CCSRCH101J50	IC 631	IC S-8423AFS
C 434	CKSSYB102K50	IC 661	IC PAJ002A
C 435	CKSSYB103K16	IC 662	IC TPD1018F
C 436	CKSSYB104K10	IC 663	IC TPD1018F
C 441	CKSRYP104K16	IC 665	IC NJM2904M
C 442	CCSRCH101J50	IC 1801	IC NJM2903V
C 443	CKSRYP104K16	IC 1850	IC TPS5103IDB
C 444	CKSSYB103K16	IC 1851	IC TPS5103IDB
C 445	CKSSYB104K10	IC 1951	IC M5237ML
C 461	CCH1408	IC 3001	IC TC7S66F
C 462	CKSRYP104K16	IC 3002	IC TC7SET08F
C 463	CKSRYP104K16	IC 3004	IC TC7SZ08FU
C 464	CKSSYB103K16	IC 3005	IC CXA1645M
C 465	CKSSYB103K16	IC 3006	IC NJM2246M
C 466	CKSSYB103K16	IC 3007	IC NJM2244M
C 467	CKSSYB103K16	IC 3601	IC NJM3404AM
C 468	CKSSYB104K10	IC 3602	IC NJM2904M
C 469	CSZS100M10	IC 3752	IC TC74HC4053AFT
C 470	CKSSYB104K10	IC 3753	IC TC7SET08FU
C 471	CCSSCH101J50	IC 3851	IC NJM3404AM
C 501	CKSSYB104K10	IC 3901	IC NJM2068MD
C 502	CCSRCH150J50	IC 3902	IC NJM3414AM
C 503	CCSRCH150J50	IC 3903	IC NJM2068MD
C 504	CKSSYB104K10	IC 3926	IC TDA7052A
C 506	CKSSYB104K10	IC 3927	IC NJM2904M
C 507	CKSSYB104K10	IC 3951	IC NJM4558M
C 508	CKSSYB104K10	IC 3952	IC TC7S66FU
C 509	CKSSYB104K10	IC 3953	IC NJM4558M
C 511	CKSSYB104K10	IC 5001	IC UPD4723GS
C 512	CKSSYB104K10	Q 551	Chip Transistor 2SC2712
C 514	CSZS100M6R3	Q 635	Transistor 2SA1036K
C 515	CKSSYB104K10	Q 636	Transistor DTC114EU
C 516	CKSSYB104K10	Q 661	Transistor 2SB1184F5
C 517	CKSSYB104K10	Q 662	Transistor DTC114EU
C 518	CKSSYB104K10	Q 664	Transistor DTC114EU
C 535	CSZS100M6R3	Q 665	Transistor 2SA1162
C 539	CCSRCH100D50	Q 667	Transistor 2SC2712
C 540	CCSRCH100D50		

AVIC-8DVD

====Circuit Symbol and No.==Part Name	Part No.	====Circuit Symbol and No.==Part Name	Part No.
Q 668 Transistor	2SC2712	D 1818 Diode	HZU7R5(B3)
Q 669 Transistor	DTC114EU	D 1841 Diode	MA110
Q 670 Transistor	DTB113ZK	D 1850 Diode	RB400D
Q 671 Transistor	UMD2N	D 1851 Diode	RB400D
Q 672 Transistor	UMD2N	D 1852 Diode	RB060L-40
Q 673 Transistor	DTC114EU	D 1853 Diode	RB060L-40
Q 675 Transistor	DTC143EU	D 1951 Diode	S1G-6904G2P
Q 1802 Transistor	DTC114EU	D 2851 LED	CL150PGCD(AB)
Q 1803 Transistor	IMD3A	D 2852 LED	CL150PGCD(AB)
Q 1804 Transistor	2SD2098	D 2853 LED	CL150PGCD(AB)
Q 1805 Transistor	2SA1037K	D 2854 Diode	CL150RCD
Q 1806 Transistor	DTC114EU	D 2855 LED	CL150PGCD(AB)
Q 1841 Transistor	2SA1037K	D 2856 Diode	MA8062(H)
Q 1842 Transistor	DTC114EU	D 2860 LED	CL150PGCD(AB)
Q 1852 FET	RK4936	D 2861 LED	CL220PGC
Q 1853 FET	RK4936	D 2862 Diode	CL150RCD
Q 1951 Transistor	2SB1572	D 2863 LED	CL150PGCD(AB)
Q 1952 Transistor	2SB1184F5	D 2864 LED	CL150PGCD(AB)
Q 1953 Transistor	DTC114EU	D 2865 Diode	MA8062(H)
Q 2851 Transistor	IMD3A	D 3001 Diode	UDZS10(B)
Q 2852 Transistor	DTC114EU	D 3002 Diode	UDZS10(B)
Q 3001 Transistor	2SC2712	D 3003 Diode	UDZS10(B)
Q 3151 Transistor	2SC2712	D 3004 Diode	UDZS10(B)
Q 3851 Transistor	DTC323TU	D 3005 Diode	UDZS10(B)
Q 3852 Transistor	DTC323TU	D 3151 Diode	UDZS6R8(B)
Q 3853 Transistor	DTC323TU	D 3153 Diode	UDZS6R8(B)
Q 3854 Transistor	DTC323TU	D 3154 Diode	UDZS6R8(B)
Q 3855 Transistor	DTC323TU	D 3155 Diode	UDZS10(B)
Q 3856 Transistor	DTC323TU	D 3156 Diode	UDZS10(B)
Q 3857 Transistor	IMD2A	D 3158 Diode	UDZS10(B)
Q 3858 Transistor	IMD2A	D 3159 Diode	UDZS10(B)
Q 3859 Transistor	IMD2A	D 3160 Diode	UDZS10(B)
Q 3901 Transistor	DTC144EU	D 3851 Diode	DAP202U
Q 3902 Transistor	DTC323TK	D 3852 Diode	DAP202U
Q 3903 Transistor	DTC323TK	D 3853 Diode	DAP202U
Q 3904 Transistor	IMD2A	D 3901 Diode	1SS355
Q 3905 Transistor	DTC323TU	D 3902 Diode	MA8047(M)
Q 3906 Transistor	DTC144EU	D 3904 Diode	DAP202U
Q 3907 Transistor	IMD2A	D 3905 Diode	1SS355
Q 5001 Transistor	2SD1760F5	D 5001 Diode	UDZS6R8(B)
D 551 Diode	HZU3R3(B1)	D 5006 Diode	MA8120(H)
D 552 Diode	UDZS5R6(B)	D 5007 Diode	MA8120(H)
D 601 Diode	1SS355	D 5008 Diode	MA8120(H)
D 661 Diode	RB751V40	D 5009 Diode	MA8120(H)
D 663 Diode	UDZ20(B)	D 5010 Diode	MA8120(H)
D 664 Diode	UDZS6R8(B)	D 5011 Diode	MA8120(H)
D 665 Diode	1SS355	D 5016 Diode	MA8120(H)
D 666 Diode	1SS355	D 5017 Diode	MA8120(H)
D 667 Diode	1SS355	D 5018 Diode	UDZS6R8(B)
D 668 Diode	1SS355	D 5019 Diode	MA8120(H)
D 669 Diode	UDZS6R8(B)	D 5020 Diode	MA8120(H)
D 670 Diode	RB500V-40	D 5021 Diode	MA8120(H)
D 671 Diode	RB500V-40	D 5022 Diode	MA8120(H)
D 1801 Diode	5KP22A	D 5027 Diode	MA8110(H)
D 1803 Diode	MA738	D 5028 Diode	MA8110(H)
D 1804 Diode	S1G-6904G2P	D 5029 Diode	MA8056(H)
D 1805 Diode	S1G-6904G2P	ZNR 551 Surge Protector	RCCA-201Q43UA-PI
D 1806 Diode	S1G-6904G2P	L 551 Inductor	CTF1295
D 1807 Diode	S1G-6904G2P	L 552 Inductor	CTF1295
D 1808 Diode	S1G-6904G2P	L 553 Inductor	CTF1295
D 1809 Diode	MA8180(M)	L 554 Inductor	CTF1295
D 1810 Diode	MA8180(M)	L 555 Inductor	CTF1295
D 1811 Diode	MA8180(M)	L 556 Inductor	CTF1295
D 1812 Diode	KS926S2	L 557 Inductor	CTF1295
D 1817 Diode	UDZ13(B)	L 571 Inductor	CTF1295

====Circuit Symbol and No.==Part Name	Part No.	====Circuit Symbol and No.==Part Name	Part No.
L 572 Inductor	CTF1295	L 3268 Inductor	CTF1557
L 573 Inductor	CTF1295	L 3269 Inductor	CTF1557
L 601 Inductor	CTF1410	L 3270 Inductor	CTF1557
L 602 Inductor	CTF1410	L 3271 Inductor	CTF1557
L 603 Inductor	CTF1410	L 3272 Inductor	CTF1557
L 604 Inductor	CTF1410	L 3273 Inductor	CTF1557
L 605 Inductor	CTF1410	L 3274 Inductor	CTF1556
L 606 Inductor	CTF1410	L 3751 Inductor	CTF1410
L 607 Inductor	CTF1410	L 3752 Inductor	CTF1410
L 608 Inductor	CTF1410	L 3951 Inductor	CTF1410
L 609 Inductor	CTF1410	L 3952 Inductor	CTF1410
L 610 Inductor	CTF1410	L 3953 Inductor	CTF1410
L 611 Inductor	CTF1410	L 3954 Inductor	CTF1410
L 612 Inductor	CTF1410	L 3955 Inductor	CTF1410
L 661 Inductor	CTF1295	L 3956 Inductor	CTF1410
L 664 Inductor	CTF1390	L 5001 Inductor	CTF1410
L 665 Inductor	CTF1295	L 5002 Inductor	CTF1334
L 666 Inductor	CTF1410	L 5003 Inductor	CTF1334
L 667 Inductor	CTF1410	L 5004 Inductor	CTF1334
L 668 Inductor	CTF1410	L 5007 Inductor	CTF1334
L 1802 Inductor	CTF1556	L 5008 Inductor	CTF1334
L 1803 Inductor	CTF1556	L 5009 Inductor	CTF1334
L 1804 Inductor	CTF1556	L 5010 Inductor	CTF1557
L 1805 Inductor	CTF1556	L 5011 Inductor	CTF1557
L 1806 Inductor	CTF1556	L 5012 Inductor	CTF1557
L 1841 Inductor	CTF1556	X 601 Ceramic Resonator 12.583MHz	CSS1108
L 1850 Inductor	CTH1254	S 2851 Switch(EJECT)	CSG1106
L 1851 Inductor	CTH1255	S 2852 Switch(RESET)	CSG1120
L 1852 Inductor	CTH1257	S 2853 Spring Switch(PC-CARD)	CSN1051
L 1853 Inductor	CTH1257	FU 1801 Fuse 2A	CEK1190
L 2851 Inductor	CTF1295	FU 1802 Fuse 4A	CEK1199
L 2852 Inductor	CTF1295	FU 1803 Fuse 2.3A	ICPS2R3
L 2853 Inductor	CTF1295	FU 1804 Fuse 4A	CEK1199
L 2854 Inductor	CTF1295	FU 1850 Fuse 1A	CEK1191
L 2855 Inductor	CTF1295	FU 3251 Fuse 1A	CEK1191
L 3001 Inductor	CTF1410	GY 572 Sensor	CSX1046
L 3002 Inductor	CTF1410	GY 573 Sensor	CSX1042
L 3003 Inductor	CTF1410	EF 1801 EMI Filter	CCG1025
L 3005 Inductor	LCTA680J3225	EF 3001 EMI Filter	CCG1081
L 3006 Inductor	CTF1410	EF 3002 EMI Filter	CCG1081
L 3025 Inductor	CTF1410	EF 3003 EMI Filter	CCG1081
L 3151 Inductor	CTF1557	EF 3004 EMI Filter	CCG1081
L 3152 Inductor	CTF1558	EF 3005 EMI Filter	CCG1081
L 3153 Inductor	CTF1557	EF 3006 EMI Filter	CCG1081
L 3154 Inductor	CTF1557	EF 3151 EMI Filter	CCG1067
L 3157 Inductor	CTF1306	EF 3152 EMI Filter	CCG1067
L 3158 Inductor	CTF1306	EF 3251 EMI Filter	CCG1030
L 3159 Inductor	CTF1306	EF 3252 EMI Filter	CCG1030
L 3251 Inductor	CTF1556	EF 5001 EMI Filter	CCG1030
L 3252 Inductor	CTF1556	FE 551 Tuner Unit	CWE1622
L 3253 Inductor	CTF1556		GPS Unit
L 3254 Inductor	CTF1556		CWX2590
L 3255 Inductor	CTF1556		
L 3256 Inductor	CTF1556		
L 3257 Inductor	CTF1556		
L 3258 Inductor	CTF1556		
L 3259 Inductor	CTF1557		
L 3260 Inductor	CTF1557		
L 3261 Inductor	CTF1557		
L 3262 Inductor	CTF1557		
L 3263 Inductor	CTF1557		
L 3264 Inductor	CTF1557		
L 3265 Inductor	CTF1557		
L 3266 Inductor	CTF1557		
L 3267 Inductor	CTF1557		
		RESISTORS	
		R 551	RS1/10S473J
		R 552	RS1/10S473J
		R 554	RS1/10S472J
		R 555	RS1/10S471J
		R 556	RS1/10S473J
		R 557	RS1/10S474J
		R 558	RS1/10S0R0J
		R 561	RN1/16SE1001D
		R 562	RN1/16SE1101D
		R 563	RN1/16SE1001D

AVIC-8DVD

====Circuit Symbol and No.==Part Name	Part No.	====Circuit Symbol and No.==Part Name	Part No.
R 572	RS1/10S151J	R 691	RS1/16S103J
R 573	RS1/10S105J	R 692	RS1/16S0R0J
R 574	RS1/16S104J	R 693	RS1/16S103J
R 575	RS1/16S0R0J	R 694	RS1/16S0R0J
R 601	RS1/16S473J	R 695	RS1/16S473J
R 602	RS1/16S473J	R 696	RS1/16S104J
R 603	RS1/16S104J	R 697	RS1/16S0R0J
R 606	RS1/16S104J	R 698	RS1/16S333J
R 608	RS1/16S104J	R 699	RS1/16S203J
R 610	RS1/16S104J	R 700	RS1/16S822J
R 612	RS1/16S104J	R 701	RS1/16S202J
R 613	RS1/16S473J	R 702	RS1/16S564J
R 614	RS1/16S0R0J	R 703	RS1/16S102J
R 615	RS1/16S104J	R 704	RS1/16S102J
R 617	RS1/16S473J	R 705	RS1/16S513J
R 618	RS1/16S105J	R 706	RS1/16S513J
R 619	RS1/16S473J	R 707	RS1/16S104J
R 620	RS1/16S473J	R 708	RS1/16S513J
R 622	RS1/16S472J	R 709	RS1/16S473J
R 626	RS1/16S104J	R 710	RS1/16S563J
R 627	RS1/16S104J	R 711	RS1/16S104J
R 628	RS1/16S472J	R 715	RS1/16S102J
R 629	RS1/16S104J	R 716	RS1/16S102J
R 630	RS1/16S473J	R 717	RS1/16S471J
R 631	RS1/16S102J	R 720	RS1/10S0R0J
R 632	RS1/16S104J	R 1801	RN1/10SE4701D
R 633	RS1/16S104J	R 1802	RS1/10S473J
R 635	RS1/16S104J	R 1803	RS1/10S102J
R 637	RS1/16S102J	R 1804	RS1/4S102J
R 638	RS1/16S104J	R 1805	RS1/10S224J
R 639	RS1/16S104J	R 1806	RS1/10S103J
R 640	RS1/16S104J	R 1807	RS1/10S103J
R 641	RS1/16S104J	R 1808	RS1/8S0R0J
R 642	RS1/16S104J	R 1820	RS1/4S471J
R 643	RS1/16S223J	R 1821	RN1/16SE8201D
R 644	RS1/16S682J	R 1822	RN1/16SE1502D
R 645	RS1/16S104J	R 1823	RN1/16SE2702D
R 646	RS1/16S104J	R 1824	RN1/16SE3303D
R 647	RS1/16S104J	R 1825	RS1/16S332J
R 648	RS1/16S104J	R 1826	RS1/16S273J
R 649	RS1/16S473J	R 1827	RS1/16S273J
R 662	RS1/8S2R2J	R 1828	RS1/16S332J
R 663	RS1/16S102J	R 1841	RS1/10S103J
R 665	RS1/16S333J	R 1842	RS1/10S103J
R 666	RS1/16S153J	R 1843	RS1/16S102J
R 667	RS1/16S104J	R 1844	RS1/16S104J
R 668	RS1/16S104J	R 1850	RS1/16S101J
R 669	RS1/16S104J	R 1851	RS1/16S101J
R 670	RS1/16S102J	R 1852	RN1/16SE1600D
R 671	RS1/16S102J	R 1853	RN1/16SE6801D
R 672	RS1/16S102J	R 1854	RN1/16SE1601D
R 673	RS1/16S104J	R 1855	RN1/16SE1600D
R 674	RS1/16S623J	R 1856	RN1/16SE5601D
R 675	RS1/16S363J	R 1857	RN1/16SE1001D
R 679	RS1/16S753J	R 1858	RS1/16S332J
R 680	RS1/16S363J	R 1859	RS1/16S332J
R 682	RS1/10S102J	R 1860	RS1/16S154J
R 683	RS1/16S102J	R 1861	RS1/16S154J
R 684	RS1/16S103J	R 1862	RS1/16S184J
R 685	RS1/16S103J	R 1864	RS1/16S184J
R 686	RS1/10S103J	R 1866	RS1/16S100J
R 687	RS1/16S562J	R 1867	RS1/16S100J
R 688	RS1/16S473J	R 1868	RS1/16S100J
R 689	RS1/16S393J	R 1869	RS1/16S100J
R 690	RS1/16S224J	R 1951	RS1/16S223J

====Circuit Symbol and No.==Part Name	Part No.	====Circuit Symbol and No.==Part Name	Part No.
R 1952	RS1/4S102J	R 3243	RS1/16S0R0J
R 1953	RS1/4S102J	R 3250	RS1/16S102J
R 1954	RS1/16S221J	R 3251	RS1/16S0R0J
R 1955	RS1/10S271J	R 3252	RS1/16S0R0J
R 1956	RN1/10SE2702D	R 3253	RS1/16S0R0J
R 1957	RN1/10SE4701D	R 3255	RS1/16S102J
R 2851	RS1/8S471J	R 3256	RS1/16S104J
R 2852	RS1/10S620J	R 3259	RS1/16S104J
R 2853	RS1/10S331J	R 3260	RS1/16S104J
R 2854	RS1/10S331J	R 3262	RS1/16S102J
R 2855	RS1/10S331J	R 3263	RS1/16S104J
R 2856	RS1/8S471J	R 3264	RS1/16S0R0J
R 2857	RS1/10S620J	R 3267	RS1/16S102J
R 2858	RS1/10S103J	R 3268	RS1/16S104J
R 2860	RS1/10S271J	R 3270	RS1/16S105J
R 3001	RS1/16S222J	R 3273	RS1/16S105J
R 3002	RS1/16S222J	R 3274	RS1/16S105J
R 3003	RN1/10SE2002D	R 3277	RS1/16S104J
R 3004	RS1/16S473J	R 3278	RS1/16S105J
R 3005	RS1/16S101J	R 3282	RS1/16S102J
R 3006	RS1/16S103J	R 3283	RS1/16S102J
R 3007	RS1/16S272J	R 3601	RS1/16S102J
R 3008	RS1/16S272J	R 3602	RS1/16S102J
R 3009	RS1/16S101J	R 3603	RS1/16S153J
R 3010	RS1/16S301J	R 3604	RS1/16S683J
R 3014	RS1/10S620J	R 3605	RS1/16S682J
R 3015	RS1/10S750J	R 3606	RS1/16S682J
R 3016	RS1/10S750J	R 3607	RS1/16S682J
R 3017	RS1/10S750J	R 3608	RS1/16S104J
R 3018	RS1/10S750J	R 3609	RS1/16S104J
R 3024	RS1/16S105J	R 3610	RS1/16S101J
R 3025	RS1/16S0R0J	R 3611	RS1/16S102J
R 3026	RS1/16S105J	R 3770	RS1/16S0R0J
R 3027	RS1/10S750J	R 3772	RS1/16S104J
R 3028	RS1/16S105J	R 3851	RS1/16S102J
R 3029	RS1/16S910J	R 3852	RS1/16S472J
R 3030	RS1/16S910J	R 3853	RS1/16S152J
R 3031	RS1/16S910J	R 3854	RS1/16S472J
R 3151	RS1/16S473J	R 3855	RS1/16S472J
R 3152	RS1/16S104J	R 3856	RS1/16S472J
R 3153	RS1/10S102J	R 3857	RS1/16S102J
R 3154	RS1/10S102J	R 3858	RS1/16S472J
R 3156	RS1/10S102J	R 3859	RS1/16S152J
R 3158	RS1/10S102J	R 3860	RS1/16S472J
R 3206	RS1/16S102J	R 3861	RS1/16S472J
R 3207	RS1/16S102J	R 3862	RS1/16S472J
R 3208	RS1/16S102J	R 3863	RS1/16S333J
R 3209	RS1/16S102J	R 3864	RS1/16S683J
R 3217	RS1/16S102J	R 3865	RS1/16S154J
R 3218	RS1/16S102J	R 3866	RS1/16S101J
R 3220	RS1/16S0R0J	R 3867	RS1/16S333J
R 3225	RS1/16S101J	R 3868	RS1/16S683J
R 3226	RS1/16S102J	R 3869	RS1/16S473J
R 3227	RS1/16S102J	R 3870	RS1/16S473J
R 3228	RS1/16S102J	R 3871	RS1/16S105J
R 3229	RS1/16S102J	R 3872	RS1/16S105J
R 3230	RS1/16S102J	R 3873	RS1/16S154J
R 3231	RS1/16S102J	R 3874	RS1/16S101J
R 3233	RS1/16S0R0J	R 3901	RS1/16S103J
R 3234	RS1/16S104J	R 3902	RS1/16S473J
R 3235	RS1/16S104J	R 3903	RS1/16S473J
R 3238	RS1/16S104J	R 3904	RS1/16S473J
R 3240	RS1/16S104J	R 3905	RS1/16S470J
R 3241	RS1/16S104J	R 3907	RS1/16S0R0J
R 3242	RS1/16S104J	R 3908	RS1/16S473J

AVIC-8DVD

====Circuit Symbol and No.==Part Name	Part No.	====Circuit Symbol and No.==Part Name	Part No.
R 3909	RS1/16S473J	C 556	CKSQYB473K50
R 3910	RS1/16S473J	C 557	CKSQYB103K50
R 3911	RS1/16S470J	C 558	CKSQYB473K50
R 3913	RS1/16S223J	C 571	CEV1R0M50
R 3914	RS1/16S203J	C 572	CKSQYF334Z25
R 3915	RS1/16S471J	C 573	CKSRYF104Z25
R 3916	RS1/16S471J	C 574	CEVQ101M10
R 3917	RS1/16S471J	C 575	CKSQYB105K16
R 3918	RS1/16S104J	C 576	CKSRYB104K16
R 3919	RS1/16S473J	C 577	CKSRYB104K16
R 3920	RS1/16S473J	C 578	CKSQYB103K25
R 3921	RS1/16S0R0J	C 579	CKSYB106K6R3
R 3926	RN1/16SE5602D	C 601	CKSRYF104Z25
R 3927	RN1/16SE1802D	C 602	CKSRYF104Z25
R 3928	RS1/16S103J	C 603	CKSRYF104Z25
R 3951	RS1/16S104J	C 604	CKSRYF104Z25
R 3952	RS1/16S104J	C 605	CKSRYF104Z25
R 3953	RS1/16S104J	C 606	CKSRYF104Z25
R 3954	RS1/16S104J	C 607	CKSRYF104Z25
R 3956	RS1/16S104J	C 608	CKSRYF104Z25
R 3958	RS1/16S563J	C 609	CKSRYF104Z25
R 3959	RS1/16S563J	C 611	CKSRYF104Z25
R 3960	RS1/16S563J	C 612	CKSRYF104Z25
R 3967	RS1/16S0R0J	C 613	CKSRYF104Z25
R 3968	RS1/16S0R0J	C 614	CKSRYF104Z25
R 3969	RS1/16S0R0J	C 631	CKSRYF104Z25
R 3970	RS1/16S0R0J	C 632	CKSRYF104Z25
R 3971	RS1/16S0R0J	C 634	CKSRYF104Z25
R 3972	RS1/16S0R0J	C 635	CEV100M16
R 3981	RS1/16S104J	C 651	CKSRYB104K16
R 3982	RS1/16S104J	C 652	CKSRYB104K16
R 3983	RS1/16S102J	C 653	CEVQ220M16
R 3986	RS1/16S104J	C 654	CKSRYB474K10
R 3987	RS1/16S104J	C 661	CSZST330M16
R 3988	RS1/16S104J	C 662	CKSRYF104Z25
R 3989	RS1/16S104J	C 663	CKSRYF104Z25
R 3990	RS1/16S104J	C 664	CKSRYF104Z25
R 3991	RS1/16S101J	C 665	CKSRYF104Z25
R 3992	RS1/16S104J	C 666	CKSRYB104K16
R 3993	RS1/16S104J	C 667	CKSRYF104Z25
R 3994	RS1/16S104J	C 668	CKSRYB104K16
R 3995	RS1/16S0R0J	C 669	CKSRYB104K16
R 3996	RS1/16S101J	C 672	CKSRYB823K16
R 3997	RS1/16S473J	C 673	CKSRYB103K50
R 3998	RS1/16S152J	C 674	CKSRYB104K16
R 5004	RS1/16S681J	C 675	CKSRYB102K50
R 5006	RS1/16S681J	C 676	CKSRYF104Z25
R 5007	RS1/16S681J	C 679	CKSRYF104Z25
R 5008	RS1/16S681J	C 682	CKSRYF104Z25
R 5009	RS1/16S101J	C 684	CKSRYB473K50
R 5010	RS1/16S101J	C 685	CKSRYB473K50
R 5011	RS1/16S101J	C 686	CKSRYB473K50
R 5012	RS1/16S101J	C 687	CKSRYB473K50
R 5015	RS1/16S101J	C 1801	CKSRYB104K16
R 5016	RS1/16S101J	C 1803	CKSRYB104K16
R 5017	RS1/16S101J	C 1804	CKSRYB104K16
R 5018	RS1/16S681J	C 1805	CKSRYB473K50
R 5019	RS1/16S681J	C 1806	CKSRYB473K50
R 5020	RS1/10S122J	C 1807	CKSRYB104K16
R 5021	RS1/10S122J	C 1808	CKSRYF103Z50
R 5022	RS1/16S100J	C 1809	CKSRYB104K16
CAPACITORS		C 1810	10000μF/16V
		C 1811	CCH1412
		C 1831	CKSRYB104K16
		C 1832	CKSRYB103K50
		C 1832	CKSRYB103K50
C 551	CKSQYB473K50		
C 552	CEV100M16		
C 553	CKSQYB473K50		
C 554	CEV100M16		
C 555	CEV100M16		

====Circuit Symbol and No.==Part Name			Part No.	====Circuit Symbol and No.==Part Name			Part No.
C	1833		CEV101M16	C	3023	330μF/6.3V	CCH1410
C	1834		CKSRYB103K50	C	3025		CEV100M10
C	1835		CKSRYB473K50	C	3026		CKSRYB105K6R3
C	1836		CKSRYB103K50	C	3027		CKSRYB105K6R3
C	1841		CKSRYB104K16	C	3028		CKSRYB103K50
C	1842		CKSRYB104K16	C	3029		CEVQ101M10
C	1850		CKSRYB103K50	C	3031		CEV100M10
C	1851		CKSRYB153K50	C	3032		CKSRYB105K6R3
C	1852		CCSRCH101J50	C	3033		CKSRYB103K50
C	1853		CCSRCH101J50	C	3034		CCSRCH680J50
C	1854		CKSRYB104K16	C	3151		CKSRYB102K50
C	1855		CKSRYB104K16	C	3152		CKSRYB102K50
C	1856		CKSRYB103K50	C	3153		CKSRYB102K50
C	1857		CCSRCH330J50	C	3154		CCSRCH101J50
C	1858		CKSRYB105K10	C	3155		CCSRCH101J50
C	1859		CKSRYB103K50	C	3156		CKSRYB102K50
C	1860		CCSRCH330J50	C	3157		CKSRYB104K16
C	1861		CKSRYB105K10	C	3158		CKSRYB104K16
C	1862		CKSYB475K10	C	3159		CKSRYB102K50
C	1863		CKSYB475K10	C	3160		CKSRYB102K50
C	1864	4.7μF	CCG1111	C	3251		CEV101M10
C	1865		CKSRYF474Z16	C	3252		CKSRYF105Z10
C	1866	4.7μF	CCG1111	C	3253		CEV220M10
C	1867		CKSRYF474Z16	C	3254		CKSRYF105Z10
C	1868	10μF	CCG1150	C	3256		CKSRYB105K6R3
C	1869	10μF	CCG1150	C	3258		CKSRYF105Z10
C	1870	100μF/10V	CCH1332	C	3259		CEVQ101M10
C	1871	100μF/10V	CCH1332	C	3260		CKSRYF104Z25
C	1872	100μF/10V	CCH1332	C	3261		CEVQ101M10
C	1873		CKSRYF104Z25	C	3601		CEVQ220M16
C	1874		CKSRYF104Z25	C	3602		CKSRYB473K50
C	1875	10μF	CCG1150	C	3603		CKSRYF104Z25
C	1876	10μF	CCG1150	C	3604		CEVQ220M16
C	1877	10μF	CCG1150	C	3605		CKSRYB184K10
C	1878	10μF	CCG1150	C	3606		CKSRYB473K50
C	1879	10μF	CCG1150	C	3607		CKSRYB224K16
C	1880	10μF	CCG1150	C	3608		CEV100M16
C	1881		CKSRYB102K50	C	3609		CKSRYF104Z25
C	1951		CKSRYB474K10	C	3610		CEV220M16
C	1952		CKSQYB105K16	C	3611		CKSRYB103K50
C	1953		CEV101M10	C	3612		CSZSR100M16
C	2851		CKSQYB102K50	C	3753		CKSRYB104K16
C	2853		CKSRYB102K50	C	3754		CKSRYB104K16
C	2854		CKSQYB104K50	C	3851		CKSRYF104Z25
C	3001		CCSRCH5R0C50	C	3852		CKSRYB471K50
C	3002		CKSRYF104Z25	C	3853		CCSRCH680J50
C	3003		CKSRYF104Z25	C	3854		CKSRYF105Z10
C	3004		CKSRYF104Z25	C	3855		CKSRYB471K50
C	3006		CKSRYB104K16	C	3856		CEV100M16
C	3007		CKSRYB104K16	C	3857		CKSRYB105K10
C	3008		CKSRYB104K16	C	3858		CKSRYB474K10
C	3009		CKSRYF104Z25	C	3859		CKSRYB105K10
C	3010		CEVQ470M16	C	3860		CKSRYB474K10
C	3011		CKSRYB103K50	C	3861		CCSRCH680J50
C	3012		CCSRCH470J50	C	3862		CKSRYF105Z10
C	3013		CCSRCH220J50	C	3901		CEV100M16
C	3014		CEV100M16	C	3902		CCSRCH151J50
C	3015		CKSRYF104Z25	C	3903		CCSR

AVIC-8DVD

====Circuit Symbol and No.====Part Name	Part No.	====Circuit Symbol and No.====Part Name	Part No.
C 3913	CEV100M16	IC 1700	IC
C 3914	CEV100M16	IC 1701	IC
C 3915	CKSRYP104Z25	IC 1702	IC
C 3918	CKSRYP105K10	IC 1703	IC
C 3920	CSZSR100M16	IC 1704	IC
C 3926	CKSRYP105Z10	IC 1705	IC
C 3927	CKSRYP105K6R3	IC 1801	IC
C 3928	CEV1R0M50	IC 1802	IC
C 3929	CKSRYP104Z25	IC 1804	IC
C 3930	CKSRYP105K10	Q 1102	Transistor
C 3931	CEVQ101M10	Q 1104	Transistor
C 3932	CKSRYP103K50	Q 1105	Transistor
C 3933	CKSRYP104Z25	Q 1107	Transistor
C 3951	CKSRYP561K50	Q 1108	Transistor
C 3952	CKSRYP105K6R3	Q 1109	Chip Transistor
C 3953	CKSRYP391K50	Q 1110	Chip Transistor
C 3954	CKSRYP102K50	Q 1111	Chip Transistor
C 3955	CKSRYP104Z25	Q 1700	Transistor
C 3956	CKSRYP105K6R3	D 1100	Diode
C 3958	CKSRYP105K6R3	D 1101	Diode
C 3959	CKSRYP221K50	D 1401	Diode
C 3960	CKSRYP561K50	D 1800	Diode
C 3962	CEV220M16	D 1801	Diode
C 3963	CCSRCH121J50	D 1802	Diode
C 3964	CEVNP2R2M35	D 1803	Diode
C 3965	CEVNP2R2M35	L 1201	Inductor
C 3971	CKSRYP391K50	L 1202	Inductor
C 3972	CKSRYP471K50	L 1401	Inductor
C 3973	CCSRCH121J50	L 1402	Inductor
C 3974	CCSRCH820J50	L 1403	Inductor
C 3975	CKSRYP102K50	L 1404	Inductor
C 3976	CEV220M16	L 1406	Inductor
C 3977	CKSRYP104Z25	L 1407	Inductor
C 3978	CKSRYP105K10	L 1700	Inductor
C 3980	CKSRYP105K10	L 1701	Inductor
C 5001	CKSRYP105K6R3	L 1702	Inductor
C 5002	CEV1R0M50	L 1704	Inductor
C 5003	CEV1R0M50	L 1705	Inductor
C 5004	CEV1R0M50	L 1706	Inductor
C 5005	CEV1R0M50	L 1707	Inductor
C 5006	CEV1R0M50	L 1708	Inductor
C 5008	CKSRYP102K50	L 1709	Inductor
C 5010	CKSRYP102K50	L 1710	Inductor
C 5011	CKSRYP102K50	L 1711	Inductor
C 5012	CKSRYP102K50	L 1712	Inductor
C 5013	CKSRYP102K50	L 1713	Inductor
C 5014	CKSRYP102K50	L 1714	Inductor
C 5015	CEV330M6R3	L 1715	Inductor
C 5022	CKSRYP105K6R3	L 1720	Inductor
C 5023	CKSRYP103K25	X 1500	Radiator 33.8688MHz
C 5025	CEV100M16	X 1700	Ceramic Resonator 4.97MHz
C 5026	CKSRYP473K16	S 1301	Spring Switch(CLAMP)
C 5027	CEV220M6R3	S 1302	Spring Switch(L/E ON/OFF)
C 5028	CKSRYP473K16	S 1303	Spring Switch(8cm DETECT)
C 5029	CKSRYP103K50	S 1304	Spring Switch(12cm DETECT)

G Unit Number : CWX2576
Unit Name : DVD Core Unit R

MISCELLANEOUS

IC 1100	IC	AN8702FH
IC 1101	IC	NJM2904M
IC 1200	IC	MN677061ZYUB
IC 1300	IC	BA5985FM
IC 1400	IC	MNZS25BDAUB

RESISTORS

R 1102	RS1/16SS3R9J
R 1104	RS1/16SS3R9J
R 1105	RS1/16SS122J
R 1106	RS1/16SS472J
R 1107	RS1/16S6201D
R 1108	RS1/16SS3R9J
R 1109	RS1/16SS3R9J
R 1110	RS1/16S1002D
R 1113	RS1/16S2402D
R 1114	RS1/16SS823J

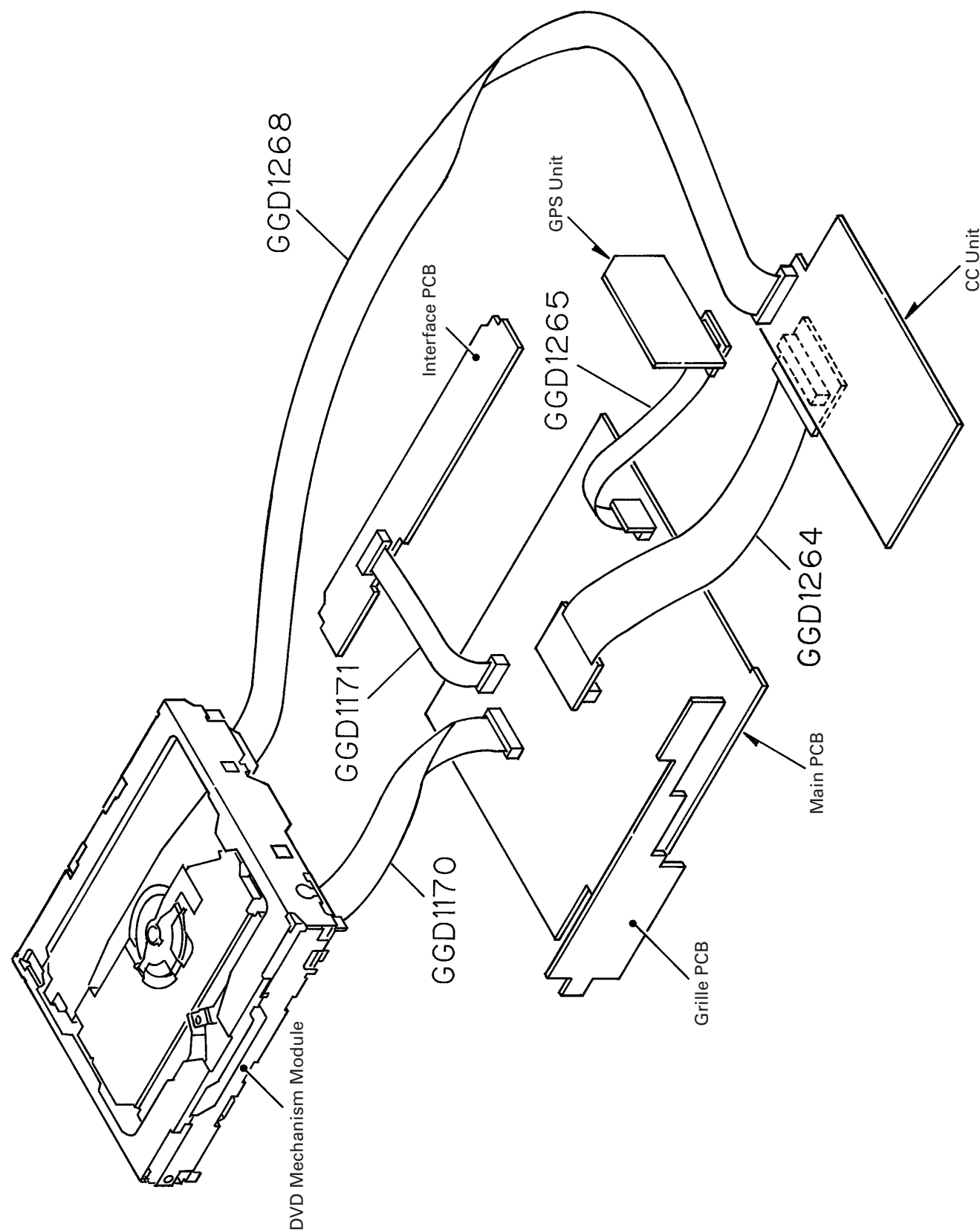
====Circuit Symbol and No.==Part Name	Part No.	====Circuit Symbol and No.==Part Name	Part No.
R 1115	RS1/16SS682J	R 1229	RS1/16SS472J
R 1116	RS1/16SS3R9J	R 1230	RS1/16SS472J
R 1117	RS1/16SS3R9J	R 1231	RS1/16SS273J
R 1118	RS1/16SS223J	R 1232	RS1/16S6801D
R 1119	RS1/16SS202J	R 1233	RS1/16SS273J
R 1120	RS1/16SS105J	R 1234	RS1/16SS183J
R 1121	RS1/16SS105J	R 1235	RS1/16SS102J
R 1122	RS1/16SS103J	R 1242	RAB4CQ221J
R 1123	RS1/16SS103J	R 1243	RAB4CQ221J
R 1124	RS1/16SS103J	R 1245	RS1/16SS562J
R 1125	RS1/16SS103J	R 1246	RS1/16SS242J
R 1126	RS1/16SS103J	R 1251	RS1/16SS473J
R 1127	RS1/16SS103J	R 1255	RS1/16SS0R0J
R 1128	RS1/16SS3R9J	R 1257	RS1/16S221J
R 1129	RS1/16SS3R9J	R 1258	RAB4CQ221J
R 1130	RS1/16SS102J	R 1262	RS1/16SS273J
R 1131	RS1/16SS102J	R 1263	RS1/16SS273J
R 1132	RS1/16SS102J	R 1264	RS1/16SS104J
R 1133	RS1/16SS102J	R 1301	RS1/16S3902D
R 1134	RS1/16SS102J	R 1302	RS1/16S3902D
R 1135	RAB4CQ0R0J	R 1303	RS1/16S3002D
R 1136	RS1/16SS133J	R 1304	RS1/16S3902D
R 1137	RS1/16SS133J	R 1305	RS1/16SS221J
R 1138	RS1/16SS0R0J	R 1306	RS1/16SS0R0J
R 1139	RS1/16SS0R0J	R 1307	RS1/16SS221J
R 1140	RS1/16SS0R0J	R 1308	RS1/16S3002D
R 1141	RS1/16SS0R0J	R 1310	RS1/16SS102J
R 1142	RS1/16SS183J	R 1311	RS1/16S3902D
R 1143	RS1/16SS273J	R 1312	RS1/16S0R0J
R 1144	RS1/16SS273J	R 1314	RS1/16SS221J
R 1145	RS1/16SS0R0J	R 1321	RS1/16SS221J
R 1146	RS1/16SS0R0J	R 1323	RS1/16SS104J
R 1147	RS1/16SS0R0J	R 1324	RS1/16SS473J
R 1148	RS1/16SS0R0J	R 1325	RS1/16SS273J
R 1149	RS1/16SS102J	R 1402	RAB4CQ103J
R 1150	RS1/16SS102J	R 1403	RS1/16SS222J
R 1151	RS1/16SS102J	R 1404	RAB4CQ820J
R 1152	RS1/16SS154J	R 1407	RAB4CQ220J
R 1153	RS1/16SS154J	R 1408	RAB4CQ220J
R 1154	RS1/16SS154J	R 1410	RAB4CQ220J
R 1156	RS1/16SS224J	R 1411	RAB4CQ220J
R 1157	RS1/16SS0R0J	R 1412	RAB4CQ0R0J
R 1158	RS1/16SS330J	R 1414	RS1/16SS820J
R 1159	RS1/16SS330J	R 1415	RS1/16SS100J
R 1201	RS1/16SS203J	R 1419	RS1/16SS103J
R 1202	RS1/16SS102J	R 1420	RS1/16SS103J
R 1203	RS1/16SS471J	R 1421	RS1/16SS820J
R 1204	RS1/16S0R0J	R 1422	RS1/16SS820J
R 1205	RS1/16SS222J	R 1423	RS1/16SS103J
R 1206	RS1/16SS473J	R 1424	RS1/16SS220J
R 1207	RS1/16SS101J	R 1429	RS1/16S470J
R 1208	RS1/16SS101J	R 1430	RS1/16SS101J
R 1209	RS1/16SS473J	R 1431	RS1/16SS103J
R 1212	RS1/16SS473J	R 1436	RS1/16SS103J
R 1213	RS1/16SS101J	R 1437	RS1/16SS103J
R 1215	RS1/16SS123J	R 1438	RS1/16SS221J
R 1216	RS1/16SS473J	R 1439	RAB4CQ0R0J
R 1219	RS1/16SS123J	R 1440	RAB4CQ0R0J
R 1220	RS1/16SS105J	R 1441	RS1/16SS0R0J
R 1221	RS1/16SS562J	R 1442	RS1/16SS221J
R 1222	RS1/16SS273J	R 1443	RS1/16SS221J
R 1223	RS1/16SS273J	R 1446	RS1/16SS104J
R 1226	RS1/16SS153J	R 1447	RS1/16SS104J
R 1227	RS1/16SS123J	R 1451	RS1/16S0R0J
R 1228	RS1/16SS472J	R 1452	RS1/16SS0R0J

====Circuit Symbol and No.==Part Name	Part No.	====Circuit Symbol and No.==Part Name	Part No.
R 1501	RS1/16SS105J	CAPACITORS	
R 1701	RN1/16SE1502D	C 1100	CKSRYB105K10
R 1702	RS1/16SS0R0J	C 1101	CKSRYB473K25
R 1703	RS1/16SS221J	C 1102	CKSSYB103K16
R 1704	RS1/16SS104J	C 1103	CSZSR101M6R3
		C 1104	CKSSYB104K10
R 1705	RS1/16SS103J		
R 1706	RS1/16SS103J		
R 1707	RS1/16SS104J	C 1105	CKSSYB104K10
R 1708	RS1/16SS0R0J	C 1106	CKSRYB473K25
R 1709	RS1/16SS104J	C 1107	CKSSYB103K16
		C 1108	CSZSR101M6R3
		C 1109	CKSSYB104K10
R 1710	RS1/16SS473J		
R 1711	RS1/16SS221J		
R 1712	RS1/16SS104J	C 1110	CKSRYB154K10
R 1713	RS1/16SS104J	C 1111	CCSSCH221J25
R 1714	RS1/16SS104J	C 1114	CCSSCH330J50
		C 1115	CKSSYB104K10
		C 1116	CCSSCH221J25
R 1715	RS1/16SS472J		
R 1716	RS1/16SS104J		
R 1717	RS1/16SS473J	C 1117	CKSRYB105K10
R 1718	RS1/16SS104J	C 1118	CKSSYB104K10
R 1719	RS1/16SS104J	C 1119	CKSSYB104K10
		C 1120	CKSSYB104K10
		C 1121	CKSSYB104K10
R 1720	RS1/16SS473J		
R 1721	RS1/16SS104J		
R 1722	RS1/16SS104J	C 1122	CSZSC470M16
R 1723	RS1/16SS473J	C 1123	CKSRYB273K25
R 1724	RS1/16SS221J	C 1124	CKSSYB104K10
		C 1125	CKSSYB104K10
		C 1126	CKSSYB473K10
R 1726	RS1/16SS104J		
R 1727	RS1/16SS103J		
R 1728	RS1/16SS104J	C 1127	CCSRCH561J50
R 1729	RS1/16SS104J	C 1128	CKSSYB104K10
R 1730	RS1/16SS473J	C 1129	CKSSYB104K10
		C 1130	CCSRCH102J50
		C 1131	CCSSCH120J50
R 1731	RS1/16SS221J		
R 1732	RS1/16SS221J		
R 1733	RS1/16SS104J	C 1133	CCSRCH561J50
R 1734	RS1/16SS104J	C 1134	CKSSYB104K10
R 1735	RS1/16SS222J	C 1136	CCSSCH101J50
		C 1137	CCSSCH101J50
		C 1138	CCSSCH101J50
R 1736	RS1/16SS221J		
R 1737	RS1/16SS221J		
R 1738	RS1/16SS104J	C 1139	CKSSYB104K10
R 1739	RS1/16SS103J	C 1140	CKSSYB103K16
R 1740	RS1/16SS103J	C 1141	CKSSYB104K10
		C 1142	CKSSYB104K10
		C 1143	CKSSYB473K10
R 1742	RS1/16SS104J		
R 1747	RS1/16SS222J		
R 1748	RS1/16SS473J	C 1144	CKSSYB473K10
R 1749	RS1/16SS104J	C 1145	CKSSYB103K16
R 1750	RS1/16SS472J	C 1146	CKSSYB473K10
		C 1148	CKSSYB103K16
		C 1201	CKSRYB105K10
R 1751	RS1/16SS103J		
R 1752	RS1/16SS104J		
R 1756	RS1/16SS473J	C 1202	CCSSCH101J50
R 1757	RS1/16SS472J	C 1203	CKSRYB474K10
R 1762	RS1/16SS104J	C 1204	CCSRCH561J50
		C 1205	CCSRCH331J50
		C 1206	CKSRYB105K10
R 1763	RS1/16SS104J		
R 1764	RS1/16SS104J		
R 1766	RS1/16SS104J	C 1207	CKSSYB104K10
R 1771	RS1/16SS104J	C 1208	CCSRCH471J50
R 1772	RS1/16SS104J	C 1209	CCSRCH391J50
		C 1210	CKSRYB105K10
		C 1211	CCSSCH101J50
R 1773	RS1/16SS104J		
R 1774	RS1/16SS473J		
R 1775	RS1/16SS221J	C 1212	CKSSYB104K10
R 1776	RS1/16SS104J	C 1213	CKSRYB474K10
R 1777	RS1/16SS104J	C 1214	CCSRCH102J50
		C 1215	CCSRCH102J50
		C 1216	CKSSYB562K25
R 1801	RS1/16S3902D		
R 1802	RS1/16S3302D		
R 1808	RS1/16SS102J	C 1217	CCSRCH102J50
R 1809	RS1/16SS102J	C 1218	CKSSYB104K10
R 1810	RS1/16S0R0J	C 1219	CKSSYB104K10
		C 1220	CKSRYB474K10
		C 1221	CCSSCH470J50

====Circuit Symbol and No.==Part Name	Part No.	====Circuit Symbol and No.==Part Name	Part No.
C 1222	CKSRYP183K25	C 1730	CKSSYP104K10
C 1223	CCSRCH102J50	C 1753	CKSRYP104K16
C 1224	CKSSYP104K10	C 1801	CKSRYP474K10
C 1225	CKSSYP104K10	C 1802	CKSRYP474K10
C 1227	CKSSYP103K16	C 1803	CKSRYP474K10
C 1228	CKSSYP104K10	C 1804	22μF/6.3V
C 1229	CCSRCH102J50	C 1805	22μF/6.3V
C 1230	CKSSYP103K16	C 1808	
C 1231	CKSSYP104K10	C 1810	
C 1232	CKSRYP154K10	C 1812	
C 1233	CKSSYP104K10	Miscellaneous Parts List	
C 1234	CKSSYP104K10		
C 1235	CKSSYP104K10		
C 1236	CKSSYP471K50		
C 1241	CKSSYP103K16	M 1	Pickup Unit(Service)(DP4)
C 1242	CKSSYP103K16	M 2	Motor Unit(LOADING)
C 1243	CKSSYP104K10	M 3	Motor Unit(CARRIAGE)
C 1300	CKSSYP103K16		Motor(SPINDLE)
C 1301	CKSSYP103K16		Fan Motor
C 1304	CKSRYP104K16		
C 1305	CEV101M16		CXX1530
C 1308	CKSSYP104K10		CXB5960
C 1400	CKSSYP104K10		CXB5955
C 1401	CKSSYP104K10		CXB6218
C 1402	CKSSYP104K10		CXM1192
C 1403	CKSSYP104K10		
C 1404	CKSSYP104K10		
C 1405	CKSSYP104K10		
C 1406	CKSSYP104K10		
C 1407	CKSSYP104K10		
C 1408	CKSSYP104K10		
C 1409	CKSSYP104K10		
C 1410	CKSSYP104K10		
C 1411	CKSSYP104K10		
C 1412	CKSSYP104K10		
C 1413	CKSSYP104K10		
C 1414	CKSRYP105K10		
C 1415	CKSSYP104K10		
C 1416	CKSSYP104K10		
C 1417	CCSSCH181J25		
C 1418	CKSSYP471K50		
C 1419	CCSSCH221J25		
C 1534	CCSSCH5R0C50		
C 1537	CCSSCH5R0C50		
C 1700	CKSSYP104K10		
C 1701	CKSSYP104K10		
C 1702	CKSSYP104K10		
C 1703	CKSSYP104K10		
C 1704	CKSSYP104K10		
C 1705	CKSSYP104K10		
C 1706	CKSSYP104K10		
C 1707	CKSRYP105K10		
C 1708	CKSSYP104K10		
C 1709	CKSSYP104K10		
C 1710	CKSSYP104K10		
C 1711	CKSSYP104K10		
C 1712	CKSSYP103K16		
C 1714	CKSYB106K6R3		
C 1715	CKSSYP104K10		
C 1719	CKSSYP471K50		
C 1720	CKSSYP103K16		
C 1721	CKSSYP104K10		
C 1722	CKSSYP103K16		
C 1728	CKSSYP104K10		
C 1729	CKSSYP104K10		

6. ADJUSTMENT

6.1 JIG CONNECTION DIAGRAM



6.2 DVD ADJUSTMENT

Cautions for servicing

This product uses 5V and 3.3V as standard voltages. The electrical potential that is the reference for signals, is not GND, but VREF (approximately 2.2V) and VHALF (approximately 1.65V).

During product adjustments, if the reference voltage is mistakenly taken as GND, and a grounding contact is made, not only would it be impossible to measure the accurate electrical potential, but also the servo motor would malfunction, resulting in the application of a strong impact on the pick up. The following precautionary measures should be strictly adhered to, in order to avoid such problems.

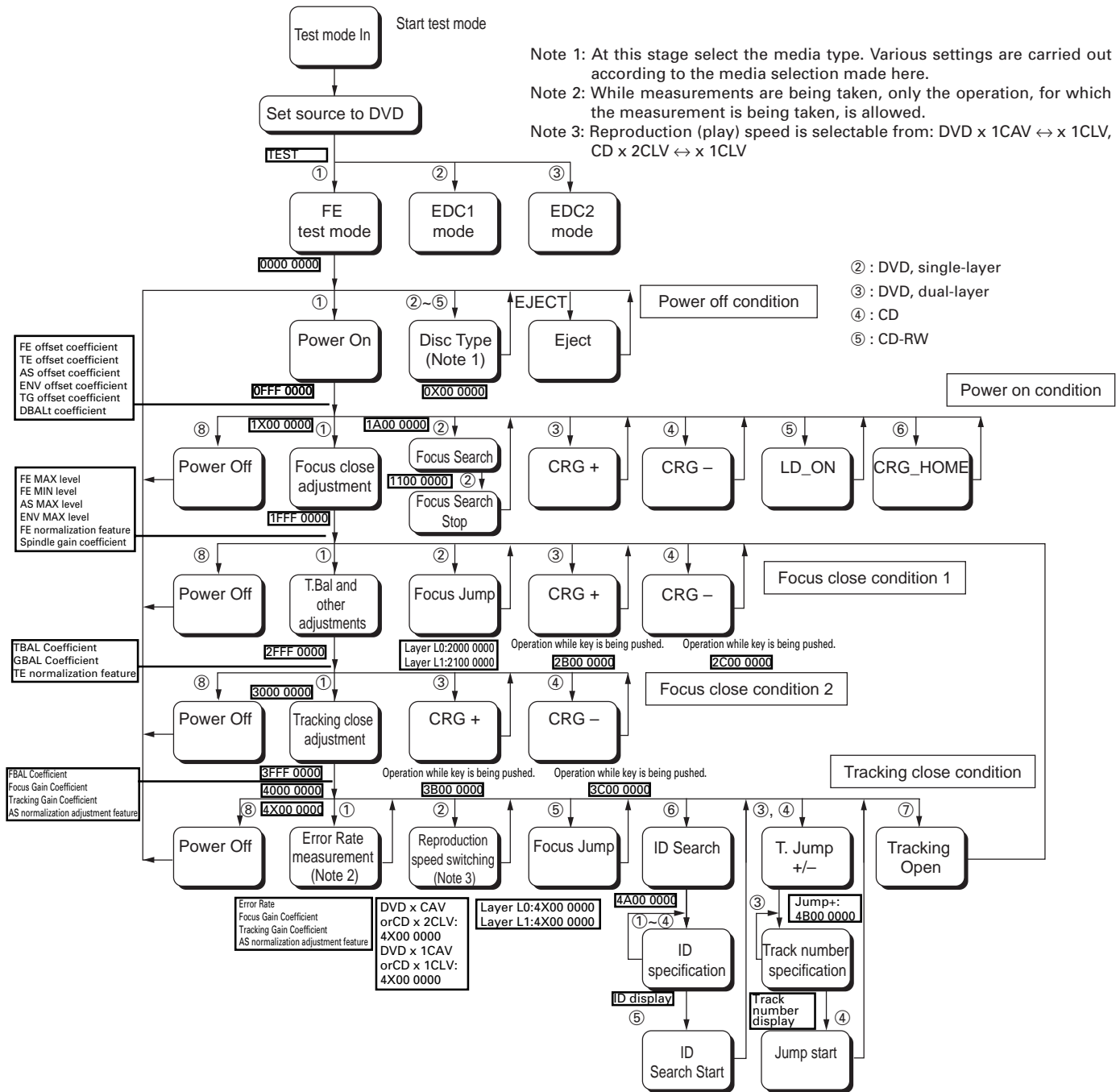
The reference voltage and GND should not be confused when using the minus probe of a measurement device. When an oscilloscope is being used special care should be taken to make sure that the reference voltage is not connected to the probe of ch1 (on the minus side), while the probe of ch2 (on the minus side), is connected to GND. Further, since the body frame of most measurement devices have the same electrical potential as the minus side of the probe, the body frame of the measurement device should be set to floating ground.

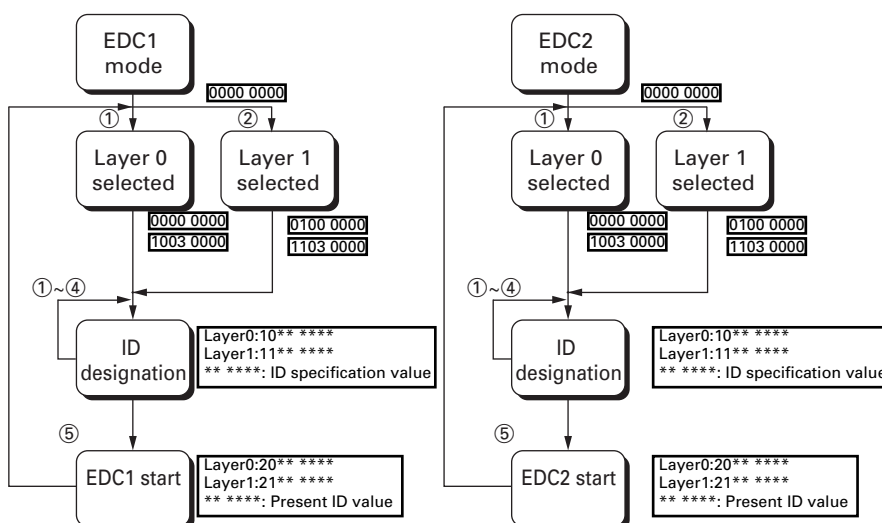
If the reference voltage is connected to GND by mistake, turn the regulator OFF immediately, or turn the power OFF.

- Remove the filters and wires used for measurements only after the regulator has been turned OFF.
- After the power supply is turned on, regulator ON the following adjustment and measurement are promptly done.
- Whenever the product is in the test mode, the software will not take any protective action. For this reason, special care should be taken to make sure that no mechanical or electrical shock could be applied to the product when taking measurements in the test mode.
- Whenever the EJECT key is pressed to eject the disk, no other keys, other than the EJECT key, should be pressed until the disk eject action has been completed.
- Press the EJECT key only after the disk has stopped completely.
- If the product hangs up turn the power OFF immediately.
- Laser diodes may be damaged, if the volume switch for the laser power adjustment of the pick up unit, is turned.
- Test mode starting procedure
The test mode can be selected from the navigation test mode.

Please use the " remote control unit of the product accessory" after the test mode starts.

● Front-End test mode flow chart





F-close and F-search cannot be executed, unless LD-ON is set.
 [If F-close isn't executed within 9 seconds after LD-ON,
 it switches to LD-OFF automatically. And even if F-search is executed
 within 9 seconds after LD-ON, it also switches to LD-OFF.]

The track number designation is selected from the track numbers already prepared for selection.
 Switching to cyclic operation is made at step ③, and the decision is finalized (entered) in step ④.
 For CD: Tracks 1, 4, 10, 11 and 32.
 For DVD: Tracks 1, 4, 10, 11, 32, 64 and 100.

Method for designating an ID address:

- A number of digits are determined through commands ① and ②. Numerical UP/DOWN operations are performed through commands ③ and ④. The decision is finalized (entered) with command ⑤.

OSD display

Error Code List

Error status from DVD micurocomputer	Contents	Display
0X50	Mecha. error	No dislay
0X40	No disc	No dislay
0X30	The temperature is abnormal	Thermal Protection in Motion
0X20	Read error	Error-02-XX
0XE2	Non-playable disc	NON-PLAYABLE DISC
0X90	Drrerent region disc	DIFFERENT REGION DISC
0XFF	Undefined error	Error-FF

Error code of read error(Part of XX)

Error Code	Contents	Display
0X99	Data cannot read	Please condirm the disc
0X80	The address cannot be found	Please condirm the disc
0X90	Focus error	Please condirm the disc
0X91	Spindle lock NG	DVD is stopping because mechanism detected abnormality
0X92	Carriage home NG	DVD is stopping because mechanism detected abnormality
0X93	FOK error	Please condirm the disc
0X94	ID/Subcode cannot be read	Please condirm the disc
0X95	High spindle rotation	Please condirm the disc
0X96	Row spindle rotation	DVD is stopping because mechanism detected abnormality
0X98	TOC cannot be found	Please condirm the disc
0X9A	AV chip error	DVD is stopping because mechanism detected abnormality
0X9B	RecoveryNG(BE)	DVD is stopping because mechanism detected abnormality

● Skew adjustment

If any of the following replacements have been performed on the system, adjustments for pick up, must be conducted:

1. Pick up unit replacement
2. Spindle motor replacement
3. Carriage chassis replacement
4. Pick up unit main shaft replacement
5. Pick up unit sub-shaft replacement

Measurement device and tools : Oscilloscope

Allen key wrench

40-pin flexible extension

Adhesive material(GEM1033)

Screw rock(GYL1001)

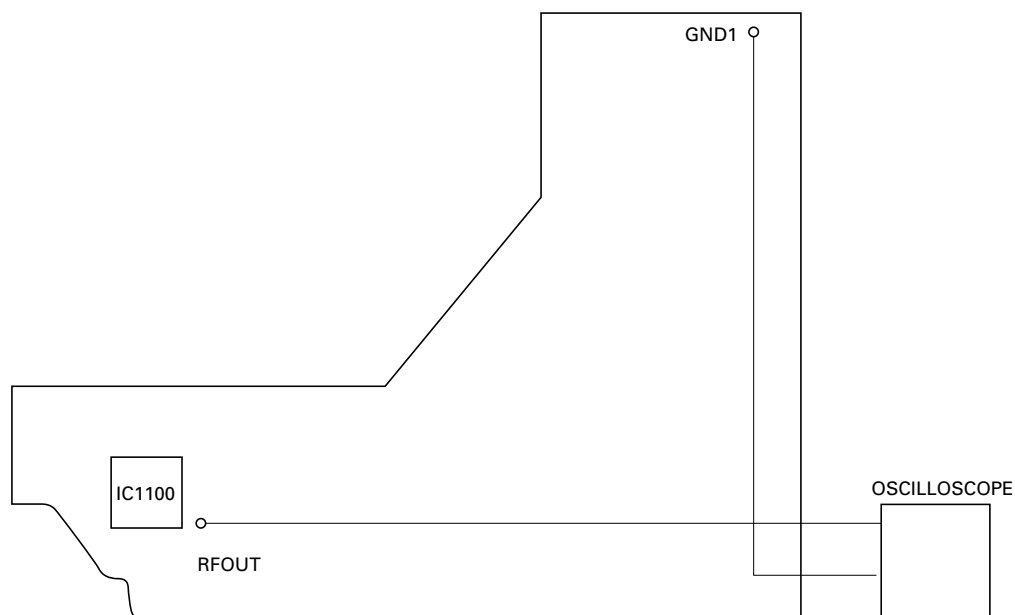
Disk used : GGV1018

Measurement reference : GND1

Measurement point : RFOUT

Skew adjustment connection diagram

- DVD Core Unit R



Symptoms that can occur if proper adjustments are not made: Error rate reaches 10^{-3} (10^{-4} or less under normal conditions).

The RF jitter becomes more pronounced - the RF waveform becomes deformed.

Retraction of the tracking and the servo motor, become unstable.

Cautions for performing adjustments: Do not look directly into the laser beam for any prolonged periods of time.

Procedure:

1. Replace the cable, connecting the product's main unit and the DVD mechanical module, with a 40-pin extended flexible cable (GGD1170), and turn the DVD mechanical module upside down, in order to proceed with pick-up unit adjustments.

2. Remove adhesive materials from the pick-up unit, using tweezers.

(Note) Make sure that adhesive material fragments are not scattered while removing the adhesive from the unit. Be also very careful not to exert excessive force on the actuator.

3. Connect the unit to an oscilloscope, referring to the connection diagram.

4. Turn the product power ON, and load the disk for adjustments (GGV1018).

5. Set the disk type to single-layer DVD in the front-end test mode, turn the power ON and then move the pick-up to the middle radius.

6. LD ON.

7. Close in the focus (Do not carry out 'T.Bal adjustment' and 'Tracking close'.)

8. Maximize the level by slightly turning the skew adjustment screw A, while looking at the RF waveform level on the oscilloscope.

Next, maximize the level by turning the skew adjustment screw B, slightly. Repeat this procedure three times and adjust the unit to attain a maximum level.

9. Turn the power OFF in the test mode, and eject the disk after verifying that it has stopped spinning.

10. Apply adhesive and screw lock materials, to the locations specified in the pick-up diagram (shown below).

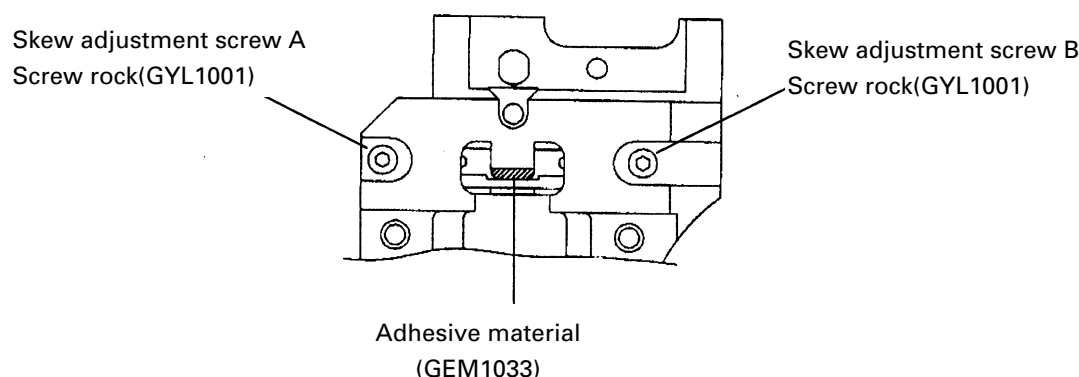
Apply the adhesive material to secure the resin components on the pick-up chassis.

Apply the screw lock material to secure the screws on the pick-up chassis.

Do not apply any of these materials to the pick-up section or mechanical sections, which are not specified.

Keep the unit away from vibration or shock until the materials securely fix the components and screws in place.

PU diagram



7. GENERAL INFORMATION

7.1 DIAGNOSIS

7.1.1 TEST MODE

● Navigation Test Modes

1. Types of Test Modes

There are two types of test modes:

1. Production Engineering Specification (this type is not available for service uses).
2. Service Specification, ROM / SDRAM version

This type is available when the system start-up is conducted from system software in ROM.

2. Test Mode System Start-Up Method

Service Specification Version (ROM / SDRAM version):

1. Press both the RESET and EJECT buttons simultaneously, when +Battery and ACC are both in an ON condition.
2. Release the RESET button only.
3. When the password entry screen is displayed, release the EJECT button.
4. Enter the password.
5. Once the password has been entered, press the OK button.
6. If the system matches the entered password the test mode menu will be displayed.

* Ordinarily, the ROM version will start up. However, if the system software is being stored on an SDRAM, and if the ACC is turned ON while the EJECT button only is being pressed, the software on the SDRAM will start up.

[Password]

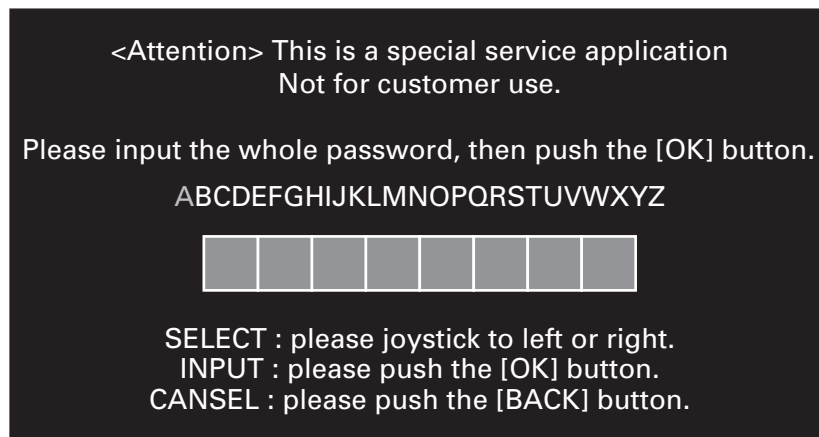
The password is "2580456".

Enter the password using the ten-key pad, then press the OK button.

All the alphabetical characters displayed are dummy displays.

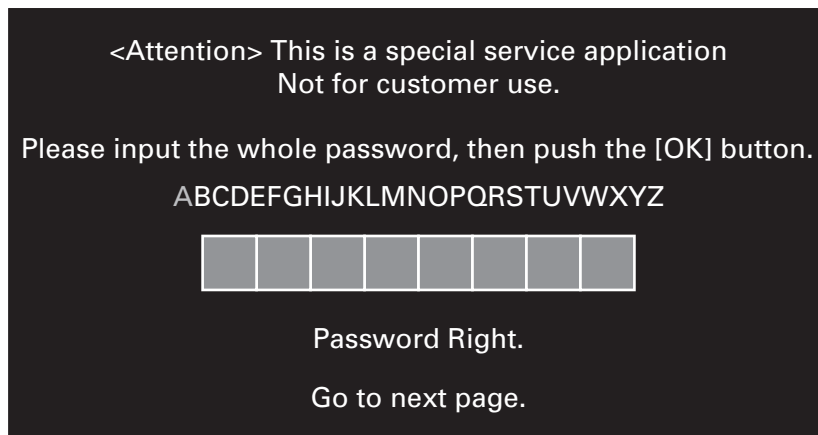
Seven digits are necessary for the password. Entering eight digits will result in a password error.

• Password Entry Screen

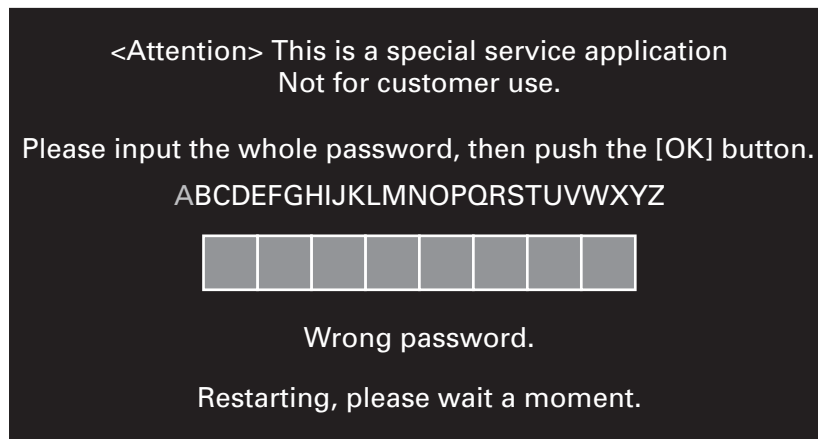


• Password OK screen:

This screen is displayed for approximately two seconds, then automatically changes to the menu screen.

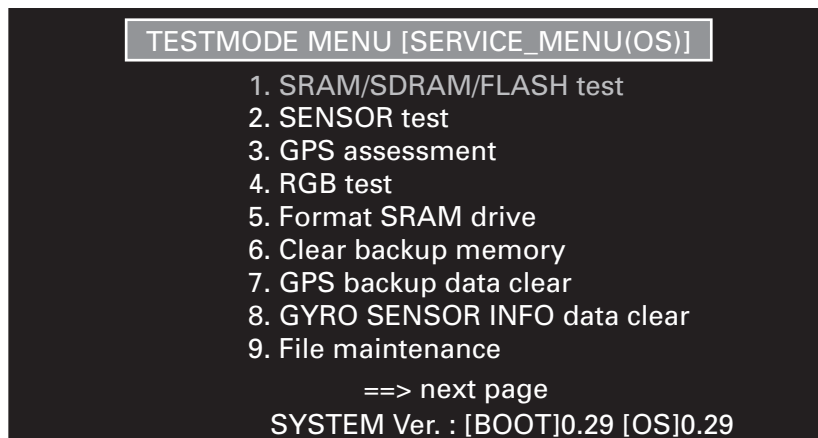


• Password NG screen

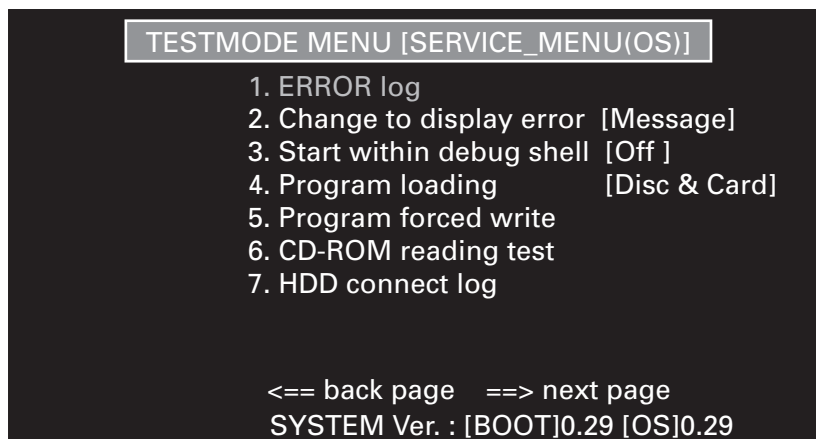


3. Service Mode Menu

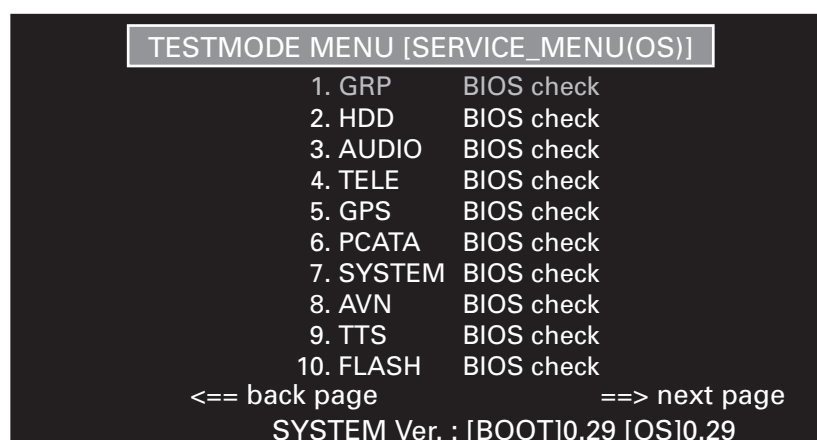
Service Specification Version (ROM / SDRAM version)



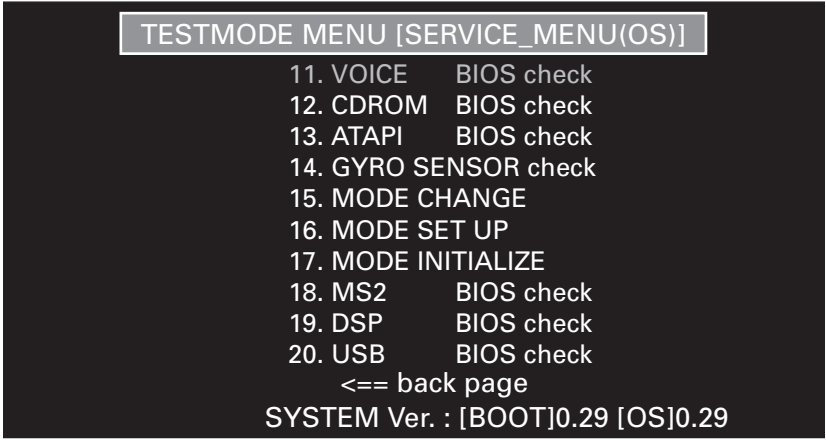
1. SRAM / SDRAM / FLASH test	<p>SRAM / SDRAM / FLASH Tests</p> <p>Tests can be started by pressing the OK button.</p> <p>SRAM: Device and bus tests are conducted to all areas of the SRAM. Data is protected during the test.</p> <p>SDRAM: Device and bus tests are conducted to all areas of the SDRAM, by dividing the areas into BIOS / USER areas. During the device tests, data in the BIOS area is not protected, while the data in the USER area is protected. During the bus test, data patterns are written in the USER area, therefore, the data in the USER area is not protected.</p> <p>FLASH: The CRC-CCITT codes are calculated from all areas within the range specified by the ROM, and are verified to match with the code values stored in the ROM.</p> <p>When a test process has been completed, the successfully (OK) completed process will be displayed in green on the screen's display listing. Pressing the OK button will return the display to the menu screen.</p>
2. Sensor test	<p>Sensor tests</p> <p>Tests on the G-sensor, gyro, power supply voltage and mechanical installation conditions, are conducted.</p> <p>Pressing the BACK key will return the display to the menu screen.</p>
3. GPS assessment	<p>GPS evaluation system start up</p> <p>Tests on the availability and usability of the GPS evaluation system are conducted.</p> <p>Pressing the BACK key will return the display to the menu screen.</p>
4. RGB test	<p>Display images RGB rendering checks</p> <p>RGB rendering tests</p> <p>(The upper half consists of eight colors of black, blue, red, pink, green, light blue, yellow and white, as well as the lower half three colors of red, green and blue.)</p> <p>-> Red (full) -> Green (full) -> Blue (full) -></p> <p>The color toggle can be implemented by using the <- and -> keys.</p> <p>Pressing the BACK key will return the display to the menu screen.</p>
5. Format SRAM drive	<p>SRAM formatting</p> <p>The SRAM area used by the application will be initialized.</p> <p>When the initialization process has been completed, the display will return to the menu screen.</p>
6. Clear backup memory	<p>Backup variable initialization</p> <p>The SRAM area used by the system software will be initialized.</p> <p>When the process has been completed, the system will reboot.</p>
7. GPS backup data clear	<p>GPS backup data clearing</p> <p>The SRAM area, used by the GPS program, will be initialized.</p> <p>When the process has been completed, the display will return to the menu screen.</p>
8. GYRO SENSOR INFO clear	<p>Gyro sensor's learning function data clearing</p> <p>The learning values stored in the gyro sensor will be cleared.</p> <p>When the process has been completed, the display will return to the menu screen.</p>
9. File Maintenance	<p>File management function test</p> <p>Conducts formatting of the SRAM drive and PC card (ATA Flash Card).</p> <p>Data stored in the SRAM can be extracted and copied to the PC Card.</p> <p>Data extracted from the SRAM to the PC Card can be copied to the SRAM again.</p>



1. ERROR Log	Error log entry test (Refer to page 125 .) Displays an error log of the system software stored in the SRAM. A maximum of eight error logs can be displayed, starting with the latest error.
2. Change to display error	Error information switch (Refer to page 126 .) A display setting (for debugging) where an error occurs. A Message (message itself) or Information (error information) selection can be made.
3. Start within debug shell	Debug shell Start-up setting for the debug shell (for debugging). An Off (no initial start-up) or On (initial start-up) selection can be made.
4. Program loading	Program loading Setting the storage location priority for the system software and application at start-up (for debugging). A Disc (disc prioritized as boot source) or Disc & Card (disc or card prioritized as boot source) selection can be made.
5. Program forced write	Forced overwriting of the program Forced overwriting of SYS (system), GPS (GPS), APL (application) software, (and DSP software for Japanese domestic versions) are performed. For the system and application, the selection of a language is required (using the joystick). Pressing the BACK key will return the display to the menu screen.
6. CD-ROM reading test	CD-ROM reading test A reading test of the CD-ROM drive will be conducted.
7. HDD connect log	Not used.



This is the menu for performing hardware evaluations.
This menu is not used for service.



18. MS2 BIOS Check : Starting the DVD test mode. (Refer to pages 129)
The name of No.18 may be changed.

This is the menu for performing hardware evaluations.
This menu is not used for service (Except [No. 18]).

4. Test Mode's Menu Selection Method

A selection can be made while moving the joystick up or down the menu. When the desired item has been emphasized, press the OK button to execute the selected test.
This selection cannot be performed using the ten-key pad.
A transition between pages of the menu can be performed by moving the joystick to the left and right.

5. Version Information

The system software's version information is provided on the bottom line of the test mode menu.

SYSTEM Ver. : [BOOT] X.XX	ROM version = X.XX. No system software exists in an SDRAM.
SYSTEM Ver. : [BOOT] X.XX [OS] Y.YY	ROM version = X.XX. SDRAM version = Y.YY.

● Error Information

1. Error Information

Descriptions of error information, for errors arising from system software problems, will be provided in this section.

Up to eight sets of information, related to the system software's errors, will be stored in the SRAM.

By executing hi_sysdwn() the line number (on which the error occurred), the error code and detailed information of the error, will be stored in the error log.

Hi_sysdwn() will be executed in the following two circumstances:

1. hi_sysdwn() will be intentionally stored if fatal errors occur with each BIOS.
2. If multiple exceptions, fatal exceptions, illegal command codes and trap command errors occur.

2. Error Log's Entry Function

Up to eight sets of information, related to errors starting with the latest error, will be displayed by the error log entry function.

There are two types of error log displays.

The display will vary when the argument provided to hi_sysdwn(), depending on whether detailed information (such as program name, version number, creation date, creation time and creator name) exists or not.

1. When detailed information exists:

```

** ERROR INFORMATION **

ERCD = f f f f f f f(-1)
FILE  = tsk_ini.c
LINE  = 144(00000090)
VERS  = 1.16
DATE  = 1999-03-19
TIME  = 12:28:58+09
AUTH  = hiroaki

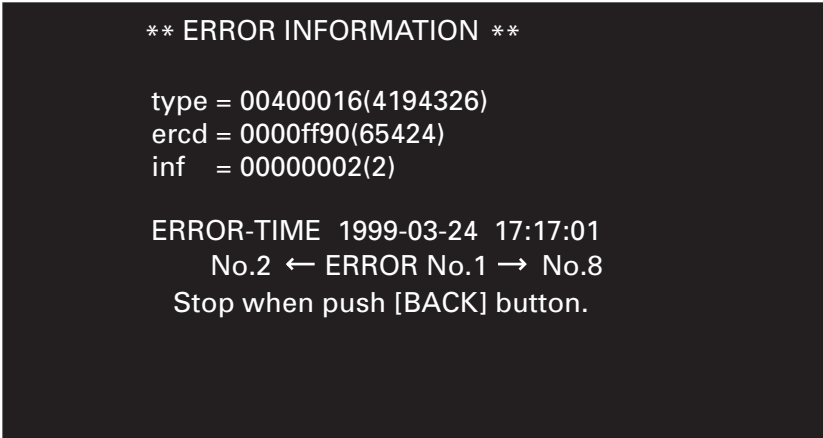
ERROR-TIME 1999-03-24 16:50:19

      No.2 ← ERROR No.1 → No.8
      Stop when push [BACK] button.

```

ERCD	Error code.
FILE	Error occurring program name.
LINE	Error occurring program line number.
VERS	Error occurring program version number.
DATE	Error occurring program creation date.
TIME	Error occurring program creation time.
AUTH	Error occurring program creator name.
ERROR-TIME	Error occurrence date and time.

2. When detailed information does not exist:



type	Error occurring program line number.
ercd	Error code.
inf	System down information.
ERROR-TIME	Error occurrence date and time.

If an error occurs due to a multiple exception, the definitions will change to the following:

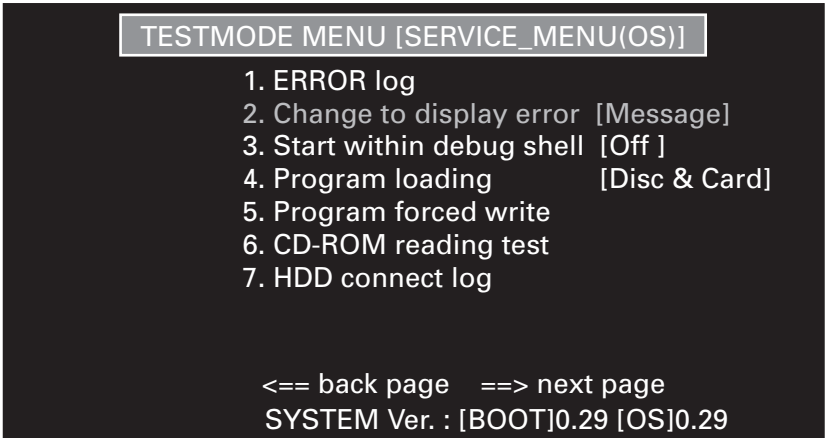
type	Execution address at the time of error occurrence.
ercd	Contributing factor for the exceptions.
inf	Program status word at the time of error occurrence.
ERROR-TIME	Error occurrence date and time.

3. Error Information Switch

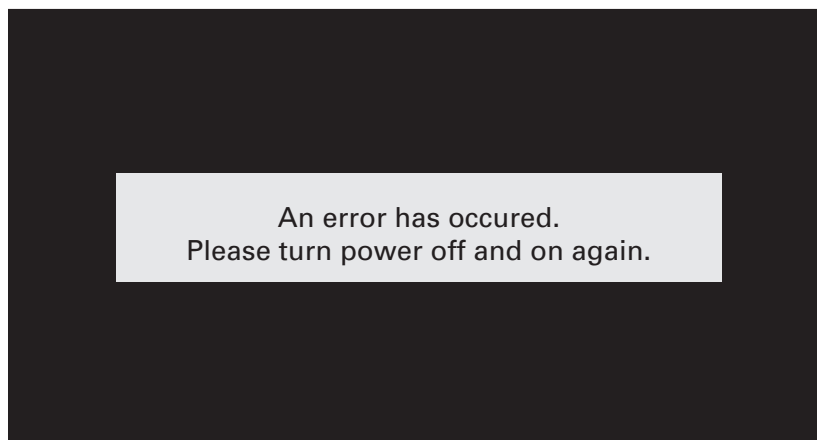
The product (with default settings) will display error messages to the user if an error occurs. Error information can be displayed if an error occurs by switching the error information in the test mode. In either case, the error log entry display will be the same.

1) Error message display (default settings):

• Setting in the test mode:

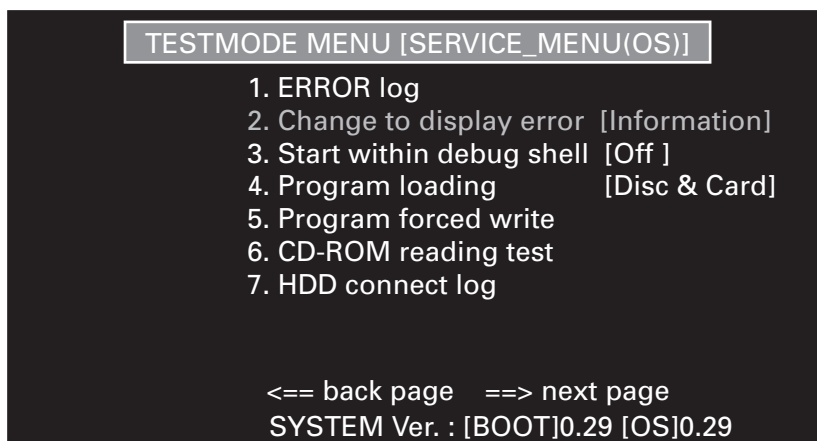


- Display when an error occurs:



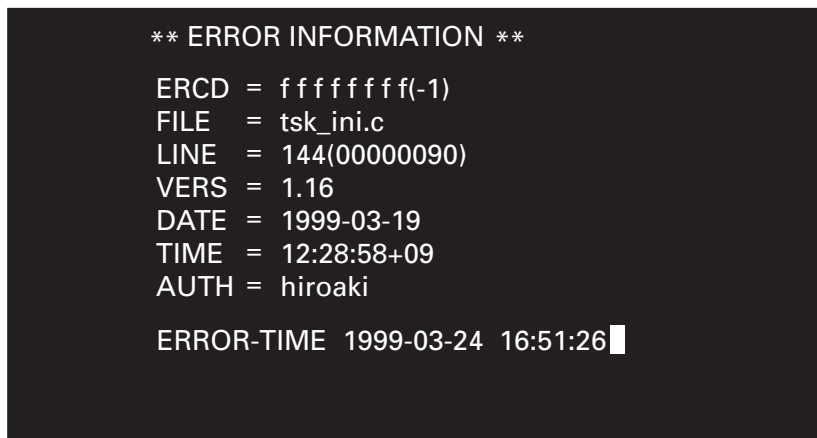
2) Error information display

- Settings in the test mode:



Display when an error occurs:

- If error information exists:



- If error information does not exist:

```
** ERROR INFORMATION **
```

```
type = 0010a316(1090326)
```

```
ercd = 0000ff90(65424)
```

```
inf  = 00000000(0)
```

```
ERROR-TIME 1999-03-24 18:34:30■
```

● DVD Test Modes

CAUTIONS

Protection is not operational against a mechanical runaway conditions during servo testing.
Critical damage can result if the system is allowed to continue in a mechanical runaway state.
If abnormal noise is heard during the test, turn the power OFF immediately.

● Entering the test mode

The test mode can be selected from the navigation test mode (please refer to pages 120 and 124).

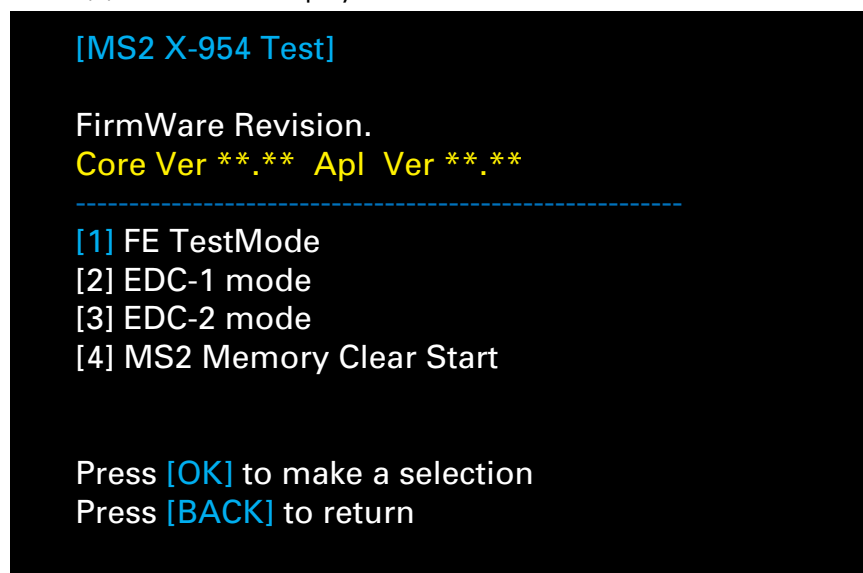
● Keys (remote control) used for the DVD test mode

[OK] : Selection decided.

[BACK] : Go back.

Directional keys : [← ↓ → ↑] keys of the joystick.

(1) Initial screen display



FirmWare Revision: Version of the drive used.

[1] Starts the FE test mode.

[2] EDC1 mode (available for DVDs only).

[3] EDC2 mode (available for DVDs only).

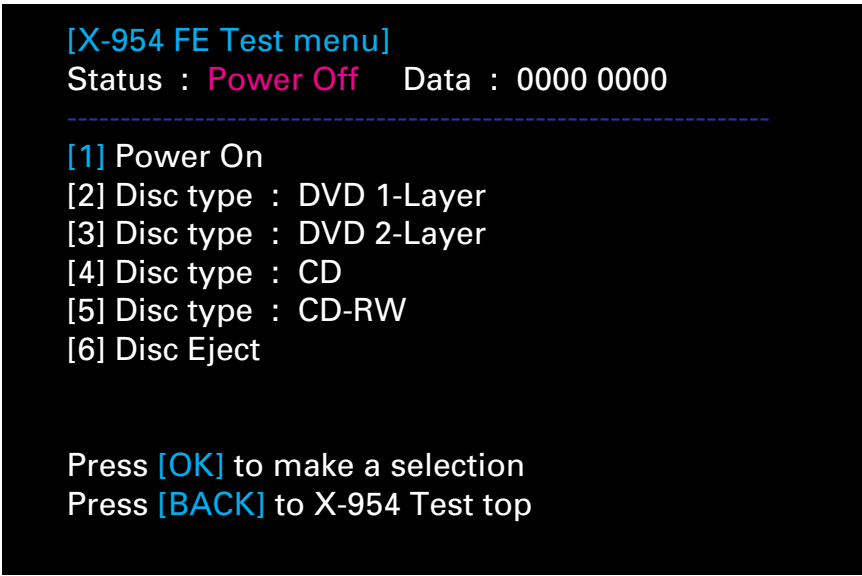
[4] Executes the MS2 memory clearing operation.

[OK] Executes.

[BACK] Returns to the test mode menu.

* Using the joystick select individual items .

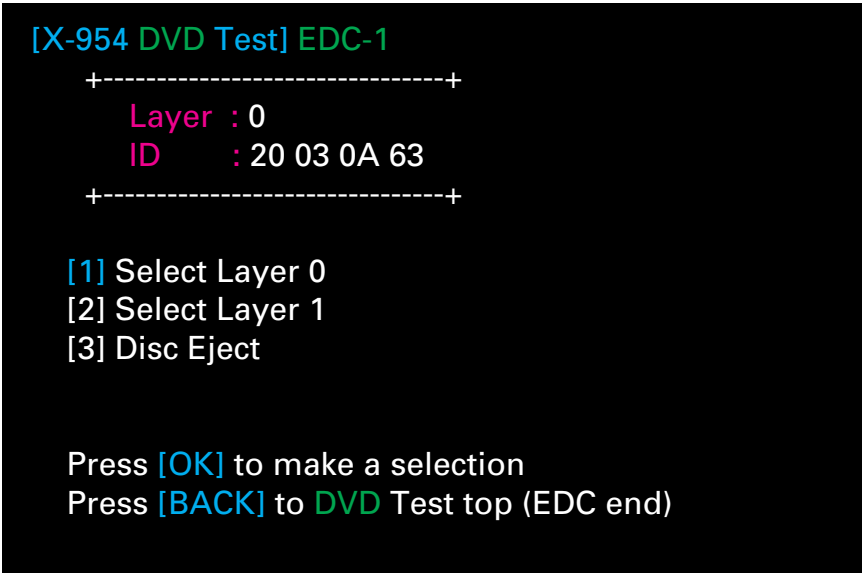
(2) FE Test Menu Screen Display



Status : "Power Off (during normal conditions)."

[1] Power On (proceed to servo test 1-0).
[2] Disk type : DVD single-layer.
[3] Disk type : DVD double-layer.
[4] Disk type : CD.
[5] Disk type : CD-RW.
[6] Ejects the disk.
[OK] Executes.
[BACK] Returns to the initial screen display for the test.
 * Using the joystick select individual items .

(3) DVD EDC Test Menu Screen Display

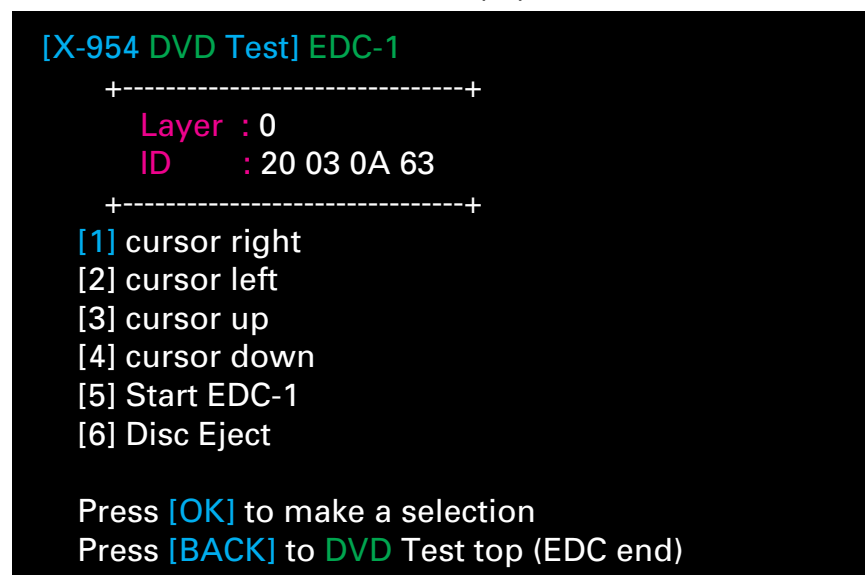


EDC-1 : Performs consecutive EDC tests.
 EDC-2 : Performs EDC tests for each block.
 ID : Performs ID of the test.

- [1] Selects layer 0.
- [2] Selects layer 1.
- [3] Ejects the disk.
- [OK] Executes.
- [BACK] Returns to the test mode menu.

* Using the joystick select individual items .

(4) DVD ECD Test Menu Screen Display



EDC-1 : Performs consecutive EDC tests.
 EDC-2 : Performs EDC tests for each block.
 ID : Performs ID of the test.

- [1] Moves the cursor to the right by one increment.
- [2] Moves the cursor to the left by one increment.
- [3] Moves the cursor up by one increment.
- [4] Moves the cursor down by one increment.
- [5] Starts the EDC test.
- [6] Ejects the disk.
- [OK] Executes.
- [BACK] Returns to the test mode menu.

(5) Servo Test Screen Display 1-0

```
[X-954 DVD Servo. Test(1-0) ]
Status : Power On      Data : 0000 0000
-----
[1] Focus Close
[2] Focus Search (Start/Stop)
[3] CRG + (Start/Stop) [4] CRG - (Start/Stop)
[5] LD-ON/OFF
[6] CRG HOME
-----
FE Offset : 0000 0000 TE Offset : 0000 0000
AS Offset : 0000 0000 ENV Offset : 0000 0000
TG Offset : 0000 0000 DBAL : 0000 0000
-----
Press [OK] to make a selection
Press [BACK] to DVD Test top (Power Off)
```

Test items are basically the same for both DVDs and CDs.

* Using the joystick select individual items.

Status : "Power On" (during normal conditions).

* Focus closing and searching will not operate unless the LD-ON setting is made.

- [1] Closes in on the focus (proceeds to servo test 2-0).
- [2] Performs a focus search operation (S-curve measurement). Focus operation will then be stopped.
- [3] Moves the carriage (external). The carriage transition operation will then be stopped.
- [4] Moves the carriage (internal). The carriage transition operation will then be stopped.
- [5] Performs LD-ON/OFF operation.
- [6] Returns the carriage to the home position.
- [BACK] Returns to the DVD test menu screen display.

* This operation will not be performed until the coefficient figures have been received.

(6) Servo Test Screen Display 2-0

```
[X-954 DVD Servo. Test(2-0) ]
Status : Focus Close   Data : 0000 0000
-----
[1] T.Bal
[2] Focus Jump
[3] CRG + (Start/Stop) [4] CRG - (Start/Stop)
-----
FE MAX : 0000 0000 FE MIN : 0000 0000
AS MAX : 0000 0000 ENV MAX : 0000 0000
FE Normal : 0000 0000 S.Gain : 0000 0000
-----
Press [OK] to make a selection
Press [BACK] to DVD Test top (Power Off)
```


Test items are basically the same for both DVDs and CDs.

* Using the joystick select individual items.

Status : "Focus Close" (during normal conditions).

- [1] Adjusts tracking balance (proceeds to servo test 3-0).
 - [2] Performs a focus jump operation.
 - [3] Moves the carriage (external). The carriage transition operation will then be stopped.
 - [4] Moves the carriage (internal). The carriage transition operation will then be stopped.
 - [BACK] Returns to the DVD test menu screen display.
- * This operation will not be performed until the coefficient figures have been received.

(7) Servo Test Screen Display 3-0

```
[X-954 DVD Servo. Test(3-0) ]
Status : Focus Close2    Data : 0000 0000
-----
[1] Tracking Close
[3] CRG + (Start/Stop) [4] CRG - (Start/Stop)
-----
T.Bal : 0000 0000 G.Bal : 0000 0000
TE Normal : 0000 0000
-----
Press [OK] to make a selection
Press [BACK] to DVD Test top (Power Off)
```

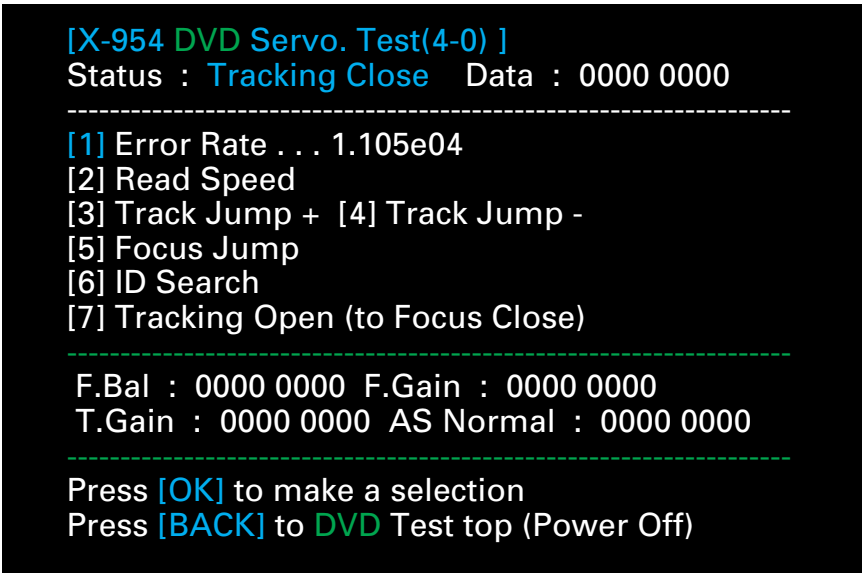
Test items are basically the same for both DVDs and CDs.

* Using the joystick select individual items.

Status : "Focus Close2" (during normal conditions).

- [1] Performs tracking close operation (proceeds to servo test 4-0).
 - [3] Moves the carriage (external). The carriage transition operation will then be stopped.
 - [4] Moves the carriage (internal). The carriage transition operation will then be stopped.
 - [BACK] Returns to the DVD test menu screen display.
- * This operation will not be performed until the coefficient figures have been received.

(8) Servo Test Screen Display 4-0



Test items are basically the same for both DVDs and CDs.
* Using the joystick select individual items.

Status : "Tracking Close" (during normal conditions).

- [1] [OK] triggers measurement of the error rates (other operations can not be performed for approximately 10 seconds).
- [2] [OK] triggers switching of the reproduction speed.
- [3] Performs track jumping by a designated number of tracks (external).
- [4] Performs track jumping by a designated number of tracks (internal).
- [5] Performs a focus jump operation (for DVDs only).
- [6] Designates an ID (for DVDs only).
- [7] Performs a tracking open operation (for the focus close status: will proceed to servo test 2-0).
- [BACK] Returns to the DVD test menu screen display.

* This operation will not be performed until the coefficient figures have been received.

Reproduction speeds

L0-layer	DVD x CAV, CD x 2CLV	4000 0000
L0-layer	DVD x 1CLV, CD x 1CLV	4200 0000
L1-layer	DVD x CAV	4100 0000
L1-layer	DVD x 1CLV	4300 0000

(9) Servo Test Screen Display 4-3/4

[X-954 DVD Servo. Test(4-3)]
Status : Tracking Close Data : 0000 0000

- [1] Track appointment
- [2] Start Track Jump +/-

Press [OK] to make a selection

Test items are basically the same for both DVDs and CDs.

Status : "Tracking Close" (during normal conditions).

- [1] Performs a track number designation (MS2 cyclically switches the ten available patterns).
- [2] Starts the tracking jump operation (will proceed to servo test 4-0).

(10) Servo Test Screen Display 4-6

[X-954 DVD Servo. Test(4-6)]
Status : Tracking Close Data : 0000 0000

- [1] ID appointment : 0000 0000
- [2] cursor right
- [3] cursor left
- [4] cursor up
- [5] cursor down
- [6] Start ID Search

Press [OK] to make a selection

Available for DVDs only.

Status : "Tracking Close" (during normal conditions).

- [1] Displays designated ID .
- [2] Moves the cursor to the right by one increment.
- [3] Moves the cursor to the left by one increment.
- [4] Moves the cursor up by one increment.
- [5] Moves the cursor down by one increment.
- [6] Starts the ID search operation (return to servo test 4-0).

7.1.2 USING THE TEST DISC

● TEST DISC Part No. : GGV1059 (CNDK-LP0102)

1. Start up

Insert the test disc into the system, and press the [BACK] key while the title, "AVIC-9DVD/EW, AVIC-9DVD/UC and AVIC-8DVD/EW TEST DISC" is displayed. This will bring up the menu screen.
If keys are not pressed while the title is displayed, the initial screen of the line testing will be displayed.

2. Key Operations

- Line testing screen display
 1. To switch between the testing screen and menu screen displays press the [CR] key.
 2. To test a selected item press the [BACK] key.
 3. To revert to the previous screen press the [↑] key.
 4. To move to the next test screen press the [↓] key (the display will not change to the next screen, unless the test has been completed successfully).

* For details please refer to descriptions for each screen.

- Menu screen for service
 1. Select an item by using the [↑] and [↓] keys, then press the [CR] key to display the test screen.
 2. To return to the menu screen press the [BACK] key.

* For details please refer to descriptions on each screen.

3. Test Screen Display

1. External Connections

Connection check		
Illumination signal		OFF
Parking brake signal		ON
Reverse gear signal		REV
Car speed signal		0
Gyro	LEFT <<	49845
Gyro voltage		2.434 V OK
Gyro delta sigma		10.6 OK
Battery voltage		12.3 V OK
G sensor	++	40635
G sensor voltage		1.985 V OK
Remote controller		MENU KEY
Helpnet switch/ sense		ON/ ON
[Push joy stick down to go to next check]		

- Status of items listed on the left will be updated every second.
- The VCUE (Pin-9) line will be turned ON during the test.
- The status of the Illumination, Parking Brake and Reverse Gear must change between ON and OFF.
- Pressing the [↓] key will not enable the test to proceed to the next test unless all conditions have been satisfied.

2. Call Origination Microphone Line (Voice Recognition)

Microphone & Gain control check

Gain level (0-7) 1

[-> to raise gain, <- to lower gain]
[Push joy stick down to go to next check]

- Voice recognition will be performed and the microphone and speaker line's connectivity tests will be conducted. Please input a voice signal in MICIN to verify the voice recognition's function, operation and input level. The gain of PROGGAIN0 through PROGGAIN2 can be increased or decreased by using the [→] and [←] of the joystick.
- Enable and disable muting of the ONSEIMUTE signal by using the Current Position key as a toggle switch.
- The next test can be performed by pressing the [↓] key.

3. Data Communications (Short Circuit Checks)

Data Communication (Short Circuit) check

Serial I/O #3 (for TV)	OK
Serial I/O #5 (for CUE Unit)	NG
+CUE Unit check	OK
Serial I/O #7 (for Debug)	OK
Serial I/O #9 (for Telephone)	OK

[Push joy stick down to go to next check]

- CUE connection will be checked for short circuits. If the CUE is not connected a loop-back check at CH5 will be performed. If the CUE connectivity or CH5 loop-back check results in an OK, the CH5 test will be successfully completed (OK).
- The SIO #1, #6 and ETC checks, will be skipped.
- If all tests result in an OK the next test can be performed by using the [↓] key.

4. Data Communications (Open Circuit Checks)

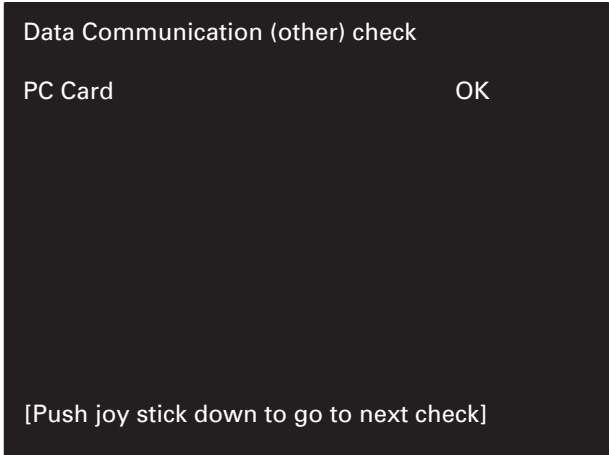
Data Communication (Open Circuit) check

Serial I/O #3 (for TV)	OK
Serial I/O #5 (for CUE Unit)	OK
Serial I/O #7 (for Debug)	OK
Serial I/O #9 (for Telephone)	OK

[Push joy stick down to go to next check]

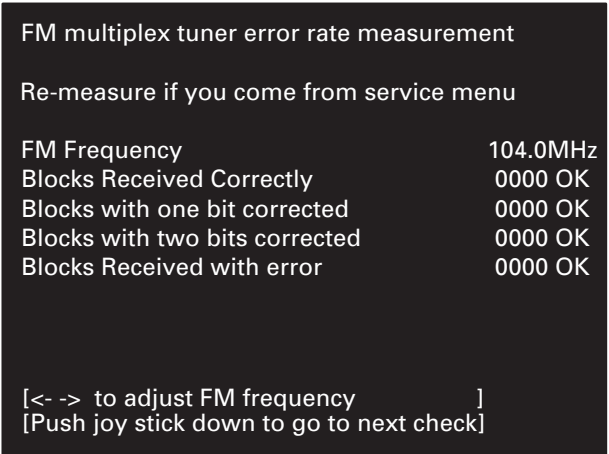
- The SIO connection is checked for open circuits. Please do not connect anything to the pins. If the circuit is determined to be open, the test will result in an OK for each SIO connection.
- The next test can be performed using the [↓] key, if all tests result in OK.

5. Data Communications (Others)



- PC card connection is checked.
- The next test can be performed by pressing the [↓] key, if all tests result in OK.

6. FM Multiplex Error Measurements



- FM multiplex error measurement is conducted.
- The default frequency is 104.0MHz.
- If the test is performed for the first time, measurements (taken at the time the test disk is started up) will be displayed.
- Please set the frequency to a frequency other than the frequency used in the previous test for all tests following the second test.
- The frequency can be changed by using the [←] and [→] keys after taking a measurement.
- 500 blocks will be tested, and if the error rate is 1% or less, the results will be displayed as "OK".
- The next test can be performed by pressing the [↓] key, if the test results in an OK.

7. Natural Image and Navigator P-side-P



- A 256-color natural image will be displayed as a background image, and the right half of the image will be changed to a chroma key color.
- The 1kHz sine wave, with a sampling rate of 22kHz, will be output for 30 seconds.
- If the test screen is displayed, turn the guidance audio ON, then turn it OFF when the screen is no longer displayed.
- The sound volume can be altered by pressing the [←] and [→] keys (from level 0 to 9).
[JPEG file name: HITO1.JPG]
[audio file name: A19K01KR.WAV]
- The next test can be performed using the [↓] key.

8. GPS Reception

GPS Self check

2001/01/25 10:10:05
 Using satellites No. 01 02 03 04 05 06 07 08
 Antenna connection OK
 Receiving signal level 0.0
 Latitude 2D 0 00'00.00
 Longitude 0 00'00.00

[Push joy stick down to go to next check]

- The status of the GPS reception will be displayed.
- Verification is made to ensure that the antenna connection is OK and that the latitude and longitude measurements are 1 degrees or more, resulting in a three-dimensional binary measurement. If these conditions have been verified to satisfy the requirements, the process can proceed to the next step.
- The next test can be performed by pressing the [↓] key.

9. GPS Sensitivity Measurements

GPS sensitivity measurment

Satellite No. 3 [← -> to select satellite]

Ch.	Lock	SNR(AMU)	SNR(dB)
1	OK	0.0	0.0
2	OK	0.0	0.0
3	OK	0.0	0.0
4	OK	0.0	0.0
5	OK	0.0	0.0
6	OK	0.0	0.0
7	OK	0.0	0.0
8	OK	0.0	0.0
All	--	Sensitivity	10.0 (dB)
		DoppRMS	345.12(Hz)

[Push joy stick down to go to next check]

- The sensitivity of the GPS selected by the [CR] key will be displayed.
- The GPS selection can be changed by pressing the [←] and [→] keys.
- The next test can be performed by pressing the [↓] key.

10. Software Version Display

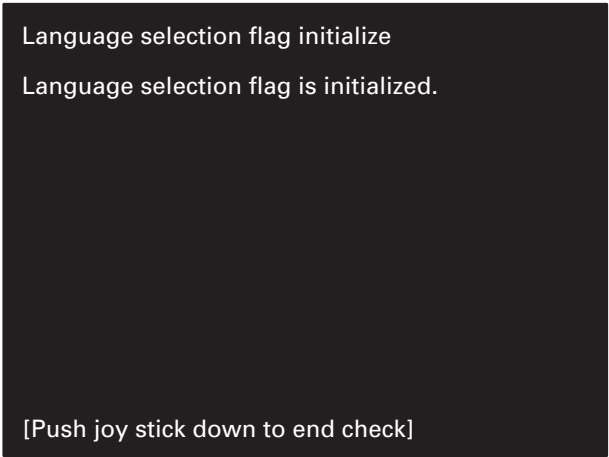
Software version

System boot version	1.00
System OS version	1.00
Syscom version	8.00
Drive core version	7.24
Drive apl version	2.44
Application version	1.00
Language data version	1.00
GPS program version	1.10

[Push joy stick down to go to next check]

- The software version will be displayed.
- The next test can be performed by pressing the [↓] key.

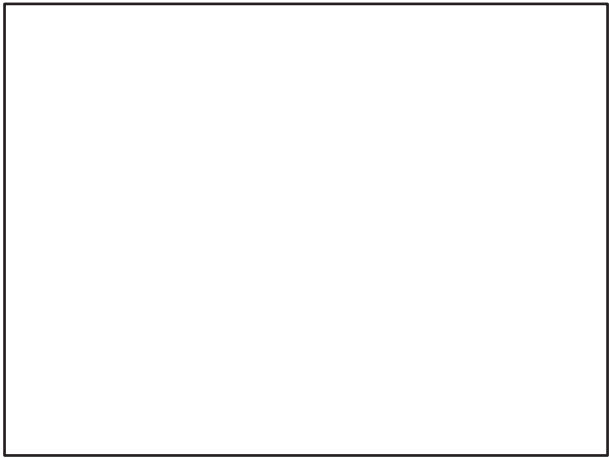
11. Language Selection Flag Initialization



- Settings will be reset to the shipping conditions upon entering into this test stage (no settings).
- Settings will be performed at the time this test starts.
- The [↓] key will terminate the production engineering test.

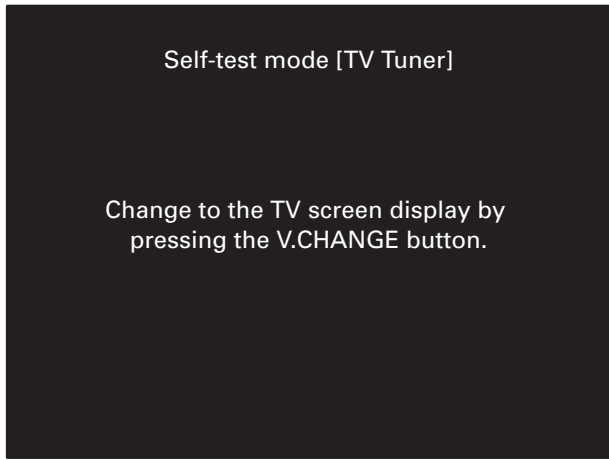
4. Menus for Service

1. Display Image RGB



- This is a test for the RGB image display.
- The display can be switched by pressing the [←] and [→] keys.
- * An RGB image display is performed in the order of R100% -> R50% -> G100% -> G50% -> B100% -> B50%.
- A total of six screen images will be displayed.

2. TV Tuner



- The display can be switched to the TV screen display by pressing the V.CHANGE button.
- Channels can be switched between 1, 8, 12, 13, 39 and 62 by using the up and down motion of the joystick.
- Turning and holding the joystick to the right or left causes the seek action to go up or down.
- Turning the joystick quickly to the right or left will cause the manual channel to scroll up or down.

3. GPS Information

GPS information								
0D	T2	H25.5	V25.5	01/03/28	23:05:47			
SV	Azi	Ev	SNR	Flag	ACC	Doppler	SrchW	
10	119	39	3.0	UY--	3	-2249	2883	
26	25	60	4.9	UYC-	2	-1051	3496	
18	310	25	0.0	--m	f	+0	12487	
23	305	33	0.0	--m	f	+0	21812	
17	317	49	0.0	--m	f	+0	21812	
9	196	56	0.0	--m	f	+0	21812	
14	260	73	0.0	--m	f	+0	5994	
4	142	81	0.0	--m	3	+0	5994	
Position SV Stat Ver & Diag Err Info								

- If the cursor is over the "Position" and the [CR] key is pressed, the "Position Information" will be displayed.
 - If the cursor is over the "SV Stat" and the [CR] key is pressed, the "Status Information" will be displayed.
 - If the cursor is over the "Ver&Diag" and the [CR] key is pressed, the "Dialog Information" will be displayed.
 - If the cursor is over the "Err Info" and the [CR] key is pressed, the "Error Information" will be displayed.
- (The screen displayed shown here represent pressing the [CR] key when the cursor will be over the "SV Stat.")

4. Audio Reproduction

Sound play	
ADPCM fixation 11K 1K L	
ADPCM fixation 11K 1K mono	
ADPCM fixation 11K 1K R	
ADPCM fixation 11K 1K ste	
ADPCM fixation 19K 1K L	
ADPCM fixation 19K 1K mono	
ADPCM fixation 19K 1K R	
Main fader Vol. [0-15] 15	
[-> Vol. up, <- Vol. down]	
[Push BACK key to go to menu]	

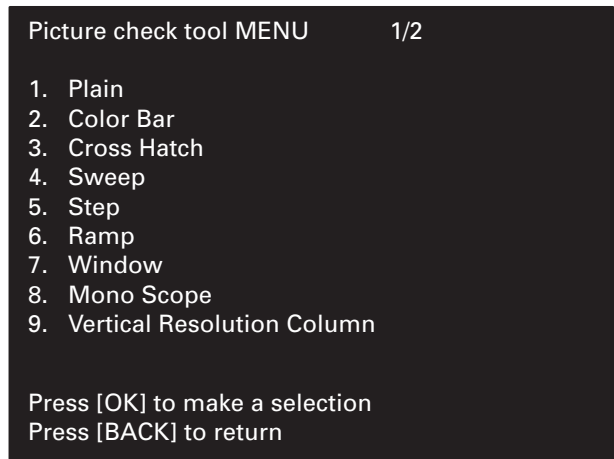
- The audio selected by the [CR] key will be reproduced.
- The audio selection can be changed by using the [←] and [→] keys.

5. File Management

File maintenance tool	
Total Capacity :	216.5K Remain : 216.3K
Media:SRAM: Path:¥	
LOGINFO.CFG 20	84 80/01/01 00:00
LOCPOS .DAT 20	68 01/01/01 21:22
[1]Media [2]Copy [3>Delete [4]Dump [0]Help	

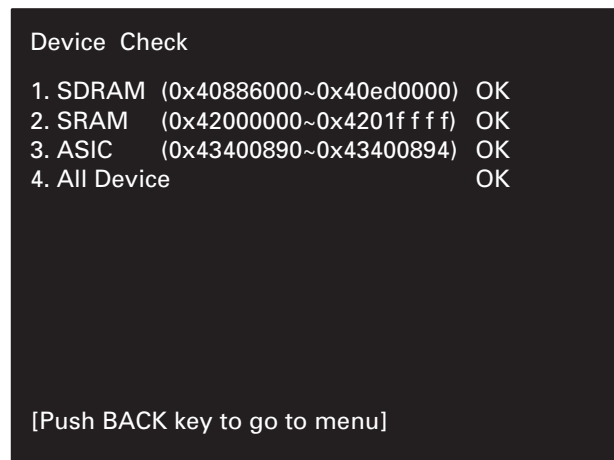
- The copying, deleting and dumping of files can be performed. Please refer to the HELP for details concerning the use of individual functions.

6. Display Image Check



- 1. Plain
... White, yellow, light blue, green, purple, red and blue are displayed by using the [←] and [→] keys.
- 2. Color bar
... These are white, yellow, light blue, green, purple, red and blue, from left to right.
- 3. Cross hatch
- 4. Sweep
- 5. Step
- 6. Ramp
- 7. Window
- 8. Monoscope
- 9. Frequency line
- 10. Horizontal stripe 1
- 11. Horizontal stripe 2
- 12. Japanese Kanji character pattern
- 13. Map (map.jpg)
- 14. Natural image (nature.jpg)
- 15. Portrait 1 (hito1.jpg)
- 16. Portrait 2 (hito2.jpg)

7. Device Check (for technical purposes only)



- The devices listed to the left are tested for technical purposes only.
- Selections are made by pressing the [↓] and [↑] keys, and then by pressing the [CR] key.
- If the test pattern is selected, the test will start.

7.1.3 DISASSEMBLY

● Removing the Case (not shown)

1. Remove the screw and then remove the Case.

● Removing the DVD Mechanism Module (Fig.1)

- 1 Remove the four screws.

Disconnect the connector and then remove the DVD Mechanism Module.

● Removing the Interface PCB (Fig.1)

- 2 Remove the two screws.
- 3 Remove the two screws.

Disconnect the connector and then remove the Interface PCB.

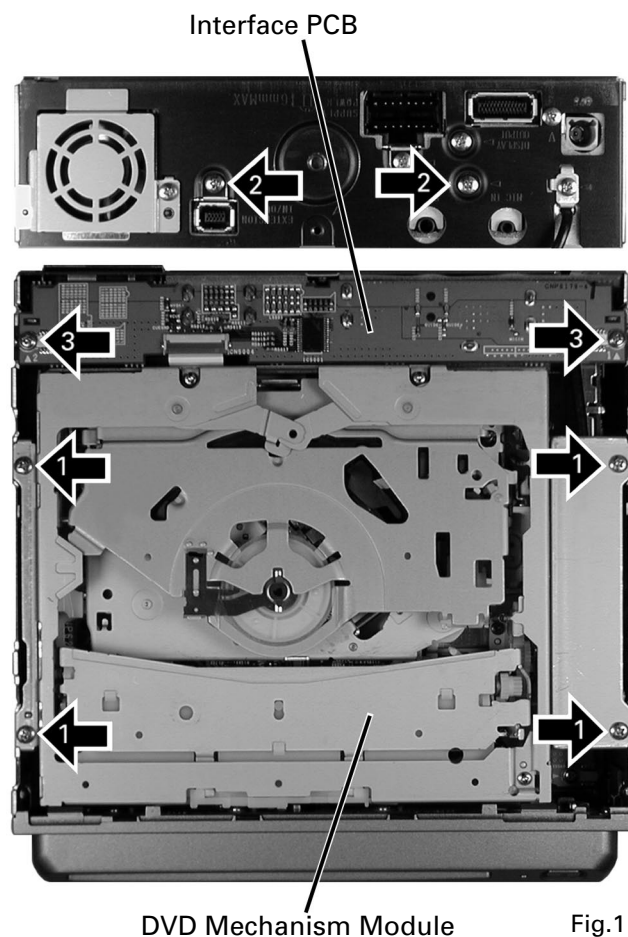


Fig.1

● Removing the Grille Assy (not shown)

1. Remove the Grille Assy.

● Removing the CC Unit (Fig.2)

- 1 Remove the solder and then straight the tab at location indicated.
- 2 Remove the three screws and then remove the CC Unit.

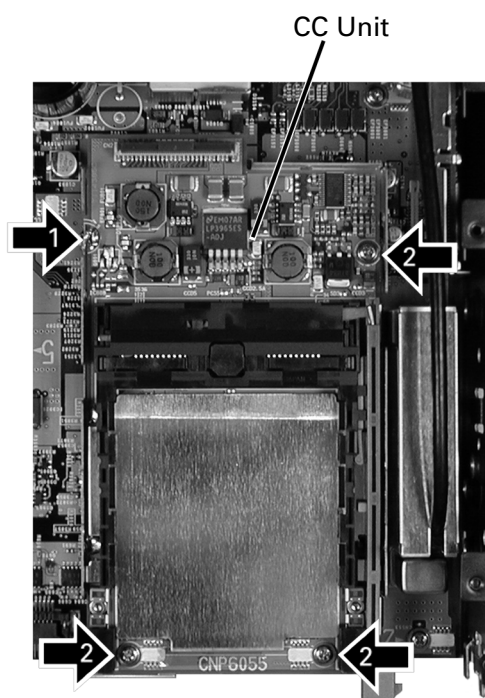


Fig.2

● Removing the Main PCB (Fig.3)

- ➡1 Remove the screw and then remove the Holder and the Battery.
- ➡2 Remove the screw and then remove the Fan Motor.
- ➡3 Remove the five screws.
- ➡4 Remove the six screws and then remove the Main PCB.

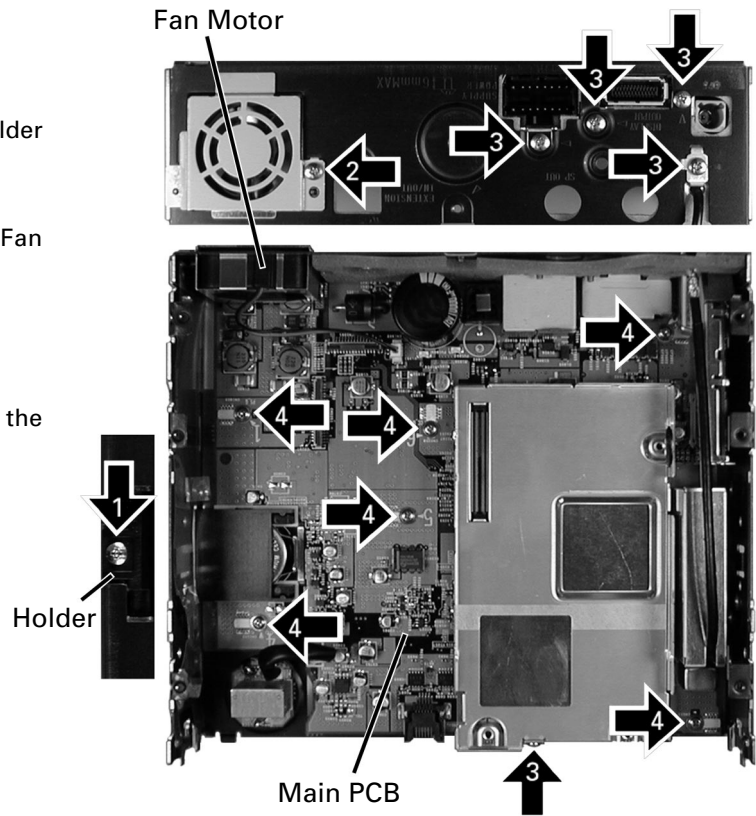
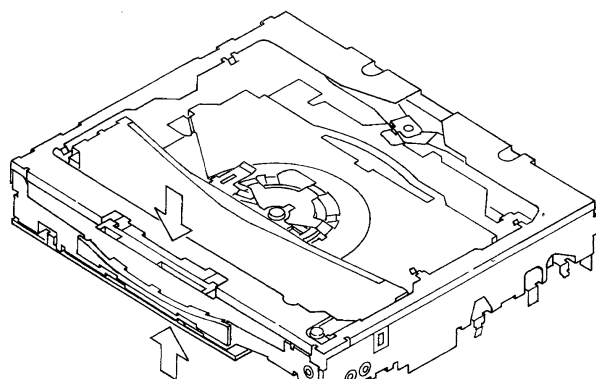


Fig.3

● Handling the mechanical module

1. The mechanical module should be handled by holding the upper frame and main frame of the mechanical module.
2. The front section of the upper frame is not very sturdy, so this section should not be held too firmly (see fig. 1).



Do not hold onto this area.

Fig. 1

● Removing the DVD Core Unit R

1. Bring the mechanism to a locked position (disk load standby position).
2. Turn the mechanical module upside down.
3. Set the pick-up flexible cable to a shorted position on the land end (the other is auxiliary), and turn the SW knob in the direction opposite to OP (see fig. 2).
4. Remove the pick-up flexible cable and the CRG flexible cable from the connector. Remove the solder on the lead wires of the load motor.
5. Remove screws at two locations, and remove the DVD Core Unit R (lift the board in the direction of the white arrow shown in fig. 3, and remove it out diagonally).

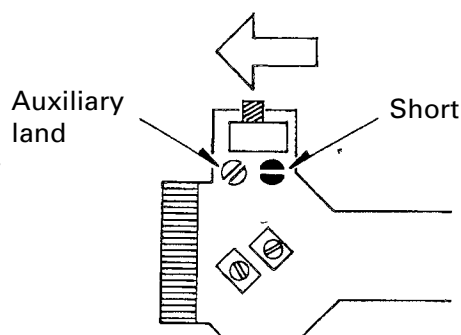


Fig. 2

DVD Core Unit R

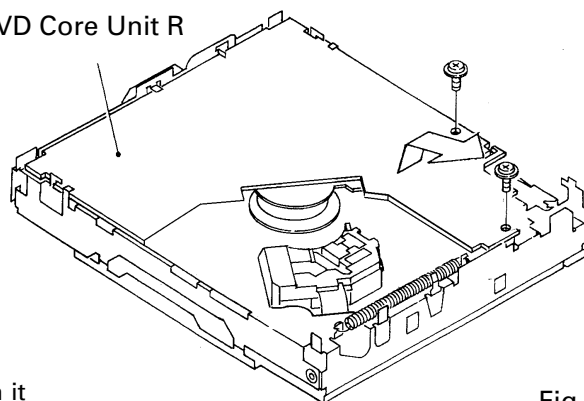


Fig. 3

● Removing the PU unit (see fig. 4)

1. Lift the pick-up rack to the center of the axis of the rack, turn it 90 degrees first, then press on it lightly, and fix it in place temporarily.
2. Remove the screw that keeps the main shaft clamp spring in place, and remove the main shaft clamp spring.
3. Remove the PU unit with the main shaft attached.

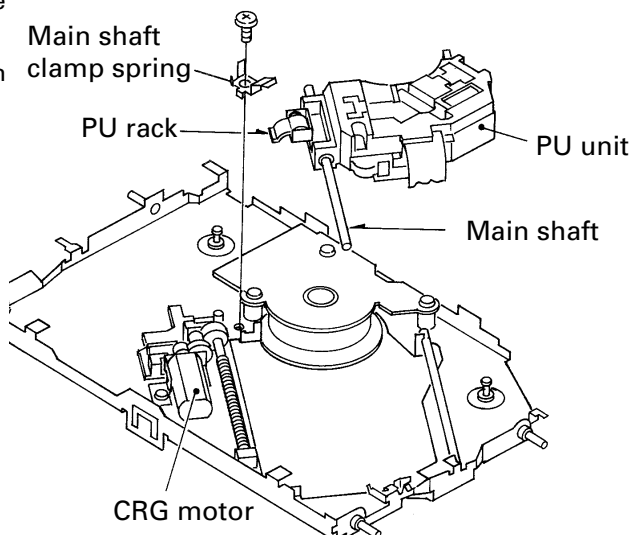
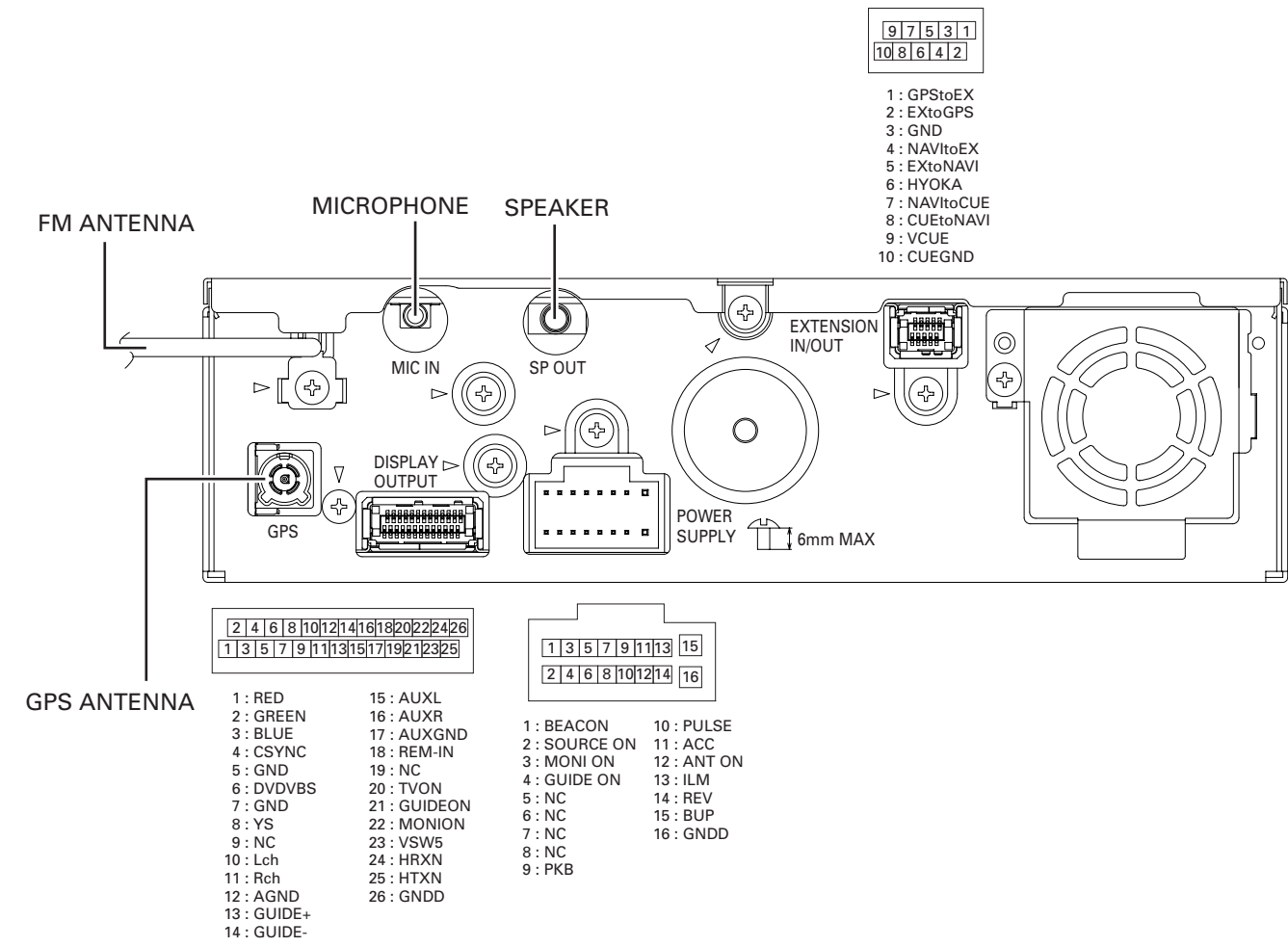


Fig. 4

7.1.4 CONNECTOR FUNCTION DESCRIPTION



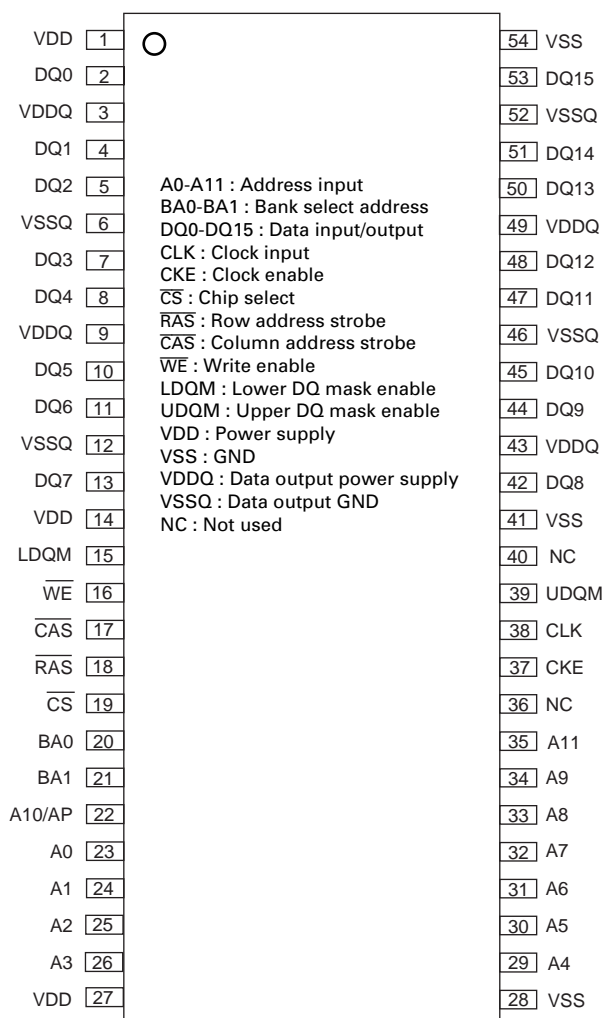
7.2 IC

K4S281632C-TL1L
M2V2840ATP-7L
TC7SZ08FU
UPD705103GM-180
PD6336B
TC74LCX08FT
TC7SH00FU
PD6349C
PD6350C
MB86291PFVS-G-DL
TC7WH08FU
PCM1725U
LP3965ES-ADJ

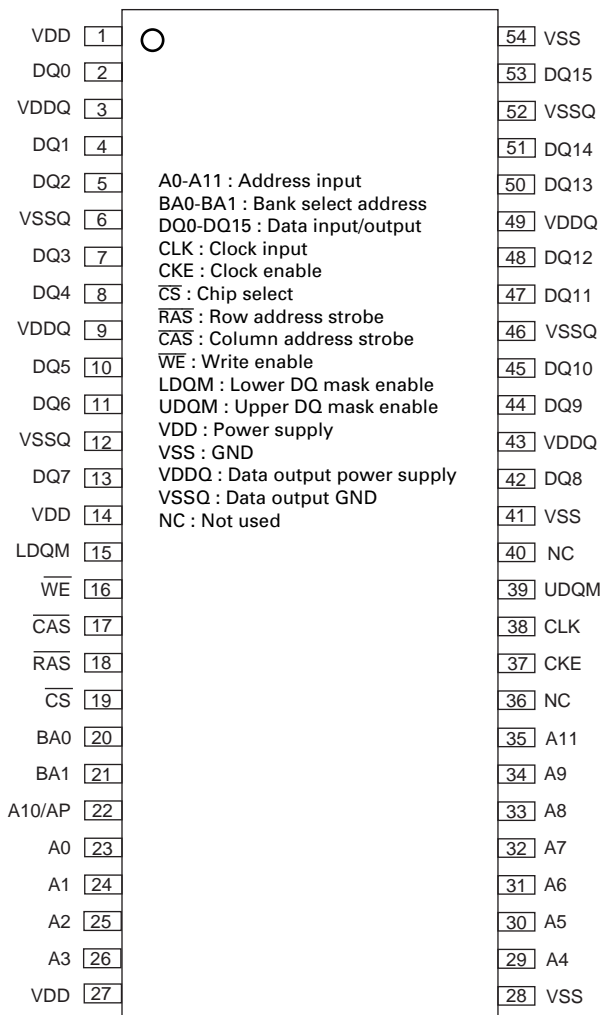
PCM1801U
TPS5102IDBT
PE5228A
TC7S14FU
TC7W126FU
TDA7052A
TPS5103IDB
LC72720YVS
MAX6364PUT29
PD6361B
AN8702FH
MN677061ZYUB
MNZS25BDAUB

PE5277A
BA033SFP
BA00BC0WFP
PD6378A

*K4S281632C-TL1L



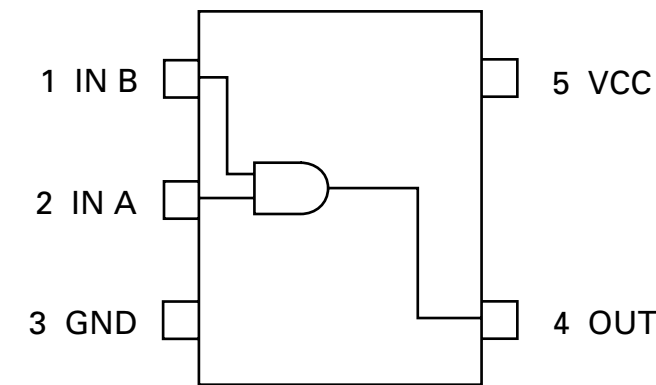
*M2V2840ATP-7L



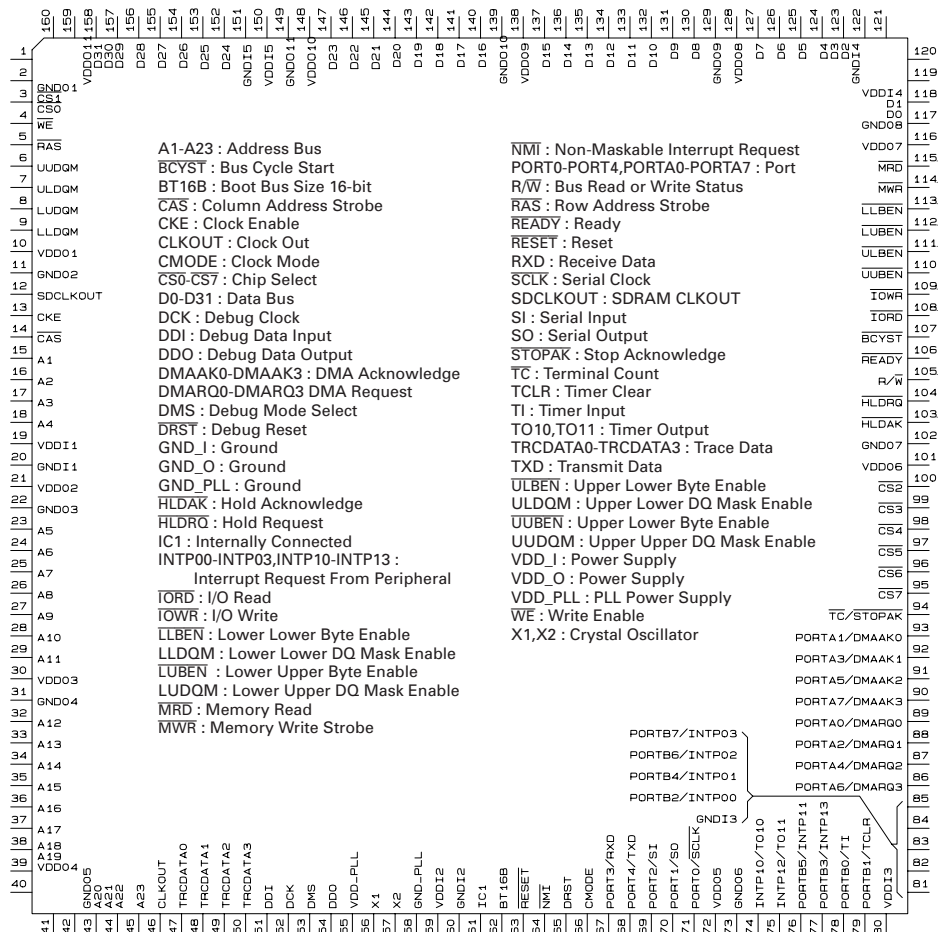
IC's marked by * are MOS type.

Be careful in handling them because they are very liable to be damaged by electrostatic induction.

*TC7SZ08FU



*UPD705103GM-180



*PD6336B

● Pin Arrangement Chart

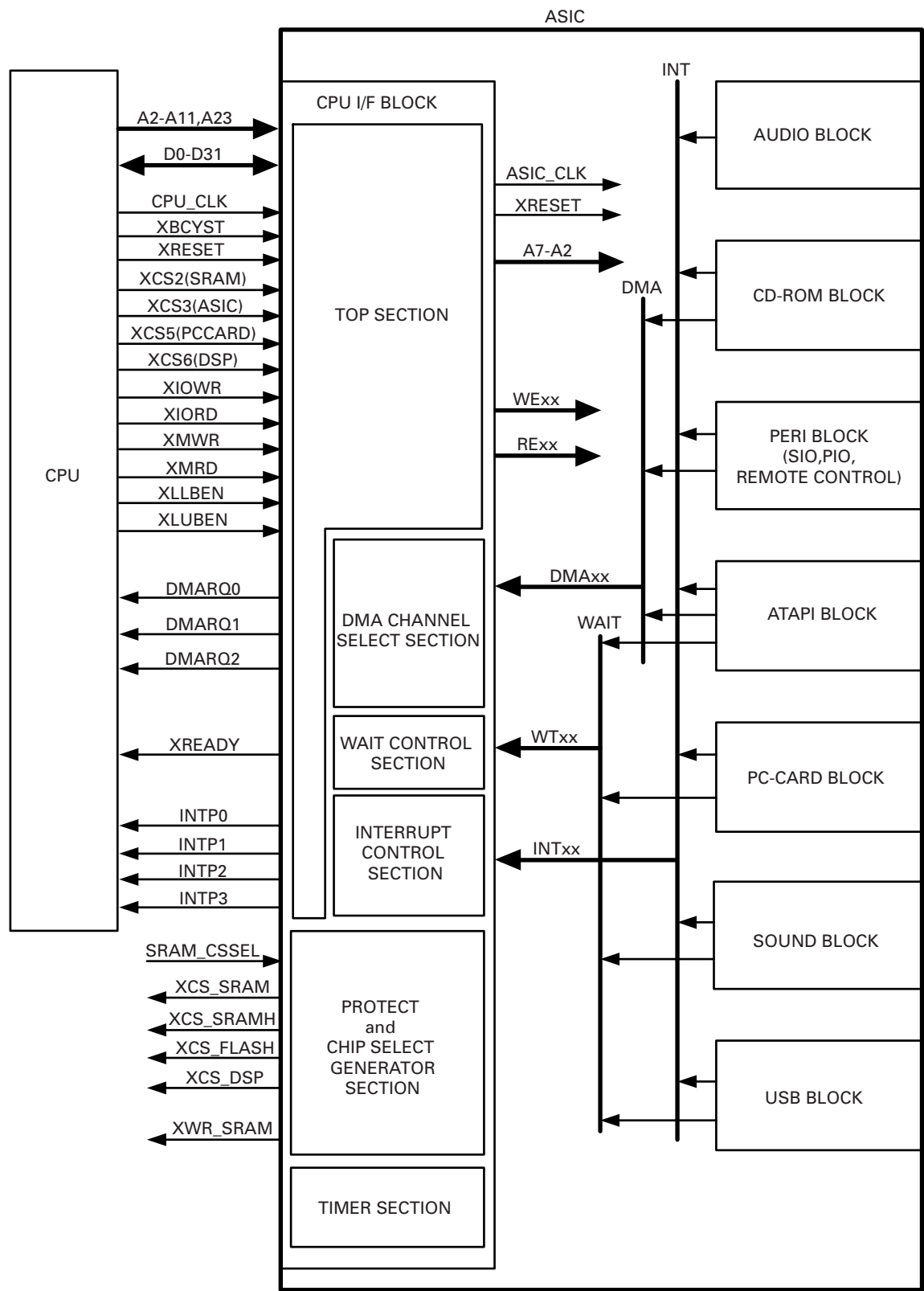
1	84	83	82	81	80	79	78	77	76	75	74	73	72	71	70	69	68	67	66	65	64
2	85	160	159	158	157	156	155	154	153	152	151	150	149	148	147	146	145	144	143	142	63
3	86	161	228	227	226	225	224	223	222	221	220	219	218	217	216	215	214	213	212	141	62
4	87	162	229	288	287	286	285	284	283	282	281	280	279	278	277	276	275	274	273	272	61
5	88	163	230															272	271	270	60
6	89	164	231															271	270	269	59
7	90	165	232															270	269	268	58
8	91	166	233															269	268	267	57
9	92	167	234															268	267	266	56
10	93	168	235															267	266	265	55
11	94	169	236															266	265	264	54
12	95	170	237															265	264	263	53
13	96	171	238															264	263	262	52
14	97	172	239															263	262	261	51
15	98	173	240															262	261	260	50
16	99	174	241															261	260	259	49
17	100	175	242															260	259	258	48
18	101	176	243	245	246	247	248	249	250	251	252	253	254	255	256	257	258	259	258	257	47
19	102	177	244	180	181	182	183	184	185	186	187	188	189	190	191	192	193	194	195	196	46
20	103	178	179	107	108	109	110	111	112	113	114	115	116	117	118	119	120	121	122	123	45
21	104	105	106	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	44
22	23	24	25																		43

TOP VIEW

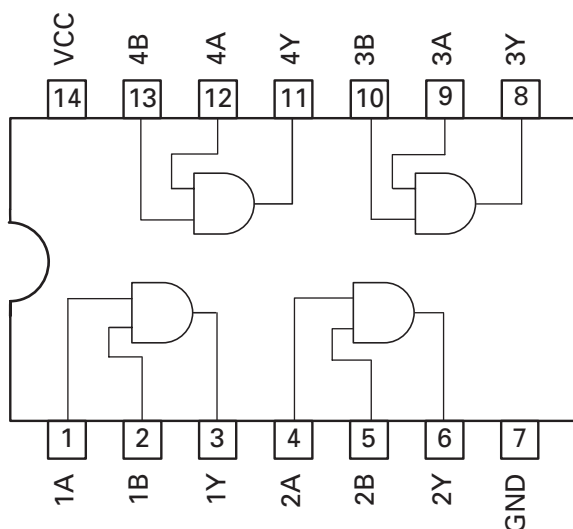
VSS	PIO27	DSP_BCLKI	PIO25	PIO24	PIO22	OVD03	DSP_BDI	DSP_BFSI	DSP_XHINT	DSP_HRDY	OVSS6	DSP_BFSO	DSP_BCLKO	XCS_SRAMH	OVD02	DSP_XRS	DSP_ATTENT	D31	CD_MCLK	ADC_GCNT1	VSS
PIO29	PIO28	PIO26	D4	D6	OVSS7	D10	XCS_DSP	D14	PIO23	D18	D20	DSP_BDO	D24	PIO_OUT	OVSS5	TEST1	CD_LRCLK	CD_BLK	ADC_GCNT0	ADC_GCNT1	ADC_DATA
USBXFPWRN	XCS_FLASH	D2	D3	D5	D8	D9	D12	D13	D16	D17	D19	D22	D23	D26	D27	D29	D30	A2	A3	ADC_BCLK	ADC_LRCLK
USBXOVRCUR	D0	D1	VSS	VDD	D7	VDD	D11	VSS	D15	VDD	VDD	D21	VSS	D25	VDD	D28	VSS	VSS	A4	ADC_MCLK	TEST4
UVD1M	XMRD	XMRW	VSS															VDD	A5	A6	EXTAL1
UVD1P	USBPWRN	XLLEN	XLUBEN															VPDP	A7	A8	OVSS4
UVD2M	XIOWR	XIORD	VDD															VDD	A9	A10	XTAL1
UVD2P	NC	NC	NC															VDD	A12	TEST2	TEST3
USBCLK	NC	NC	NC															VSS	PC_READY	DAC_MCLK	DAC_LRCLK
XCS_SRAM	XREADY	XBCYST	VDD															PC_XVS2	PC_RESET	DAC_BCLK	DAC_DATA
XWR_SRAM	SRAM_CSSEL	XCS2	VDD															VDD	PC_WXT	PC_XREG	PIO21
PIO31	PIO30	XCS3	XCS5															VDD	PC_BVD1	PC_WP	OVSS3
IR_RX	XCS6	DREQ0	VSS															VSS	PC_BVD1	PC_WP	CD_DATA
TEST0	XTST	DREQ1	DREQ2															VSS	PC_XCD1	PC_XCE1	PIO18
XTAL0	SMCK	INT3	VDD															VDD	PC_XCD1	PC_XCE2	PIO16
MST	XSM	INT2	INT1															VDD	PC_XOE	PC_XVS1	PIO14
EXTAL0	GDC_WT	INT0	VDD															VSS	PC_XOE	PC_XVS1	PIO12
UART9_TXD	UART9_RXD	ATA_DA0	VSS	VSS	ATA_XDIOR	VDD	ATA_DD1	VSS	ATA_DD5	VDD	VDD	ATA_DD10	VSS	ATA_DD14	VDD	ATA_XCS0	VDD	VSS	PC_XIOWR	PIO11	PIO10
UART8_TXD	UART8_RXD	ATA_DA1	ATA_INT	ATA_XDMACK	ATA_ORDY	ATA_DMARD	ATA_DD0	ATA_DD3	ATA_DD4	ATA_DD8	ATA_DD9	ATA_DD12	ATA_DD13	ATA_DD14	ATA_DA2	ATA_XCS1	PC_XPWR	VSS	PC_XIOWR	PIO9	PIO8
UART7_TXD	UART7_RXD	UART6_RXD	OVSS0	UART4_RXD	XRESET	ATA_XDIOW	UART3_RXD	ATA_DD2	UART1_RXD	ATA_DD6	ATA_XRESET	UART_XDCD	ATA_DD11	UART_XR1	ATA_DD15	UART_XDTR	ATA_DIR	PC_XUBUF	PC_XWE	PIO7	PIO6
VSS	UART6_TXD	UART5_RXD	UART5_TXD	UART4_TXD	UART3_TXD	OVD00	UART2_TXD	UART2_RXD	UART1_TXD	A23	CPU_CLK	OVSS1	UART1_XCTS	UART_XDSR	OVD01	UART_XRTS	PIO0	PIO1	OVSS2	PIO5	PIO4

TOP VIEW

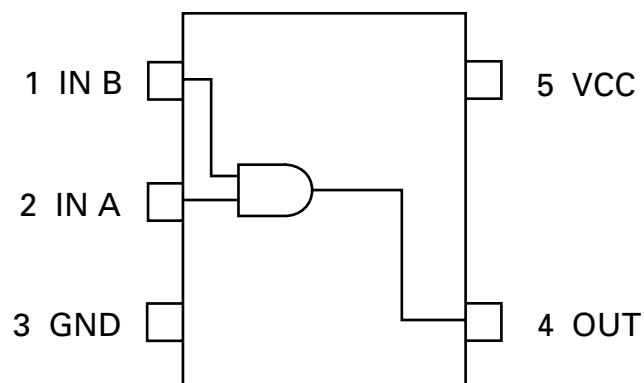
● Block Diagram Chart



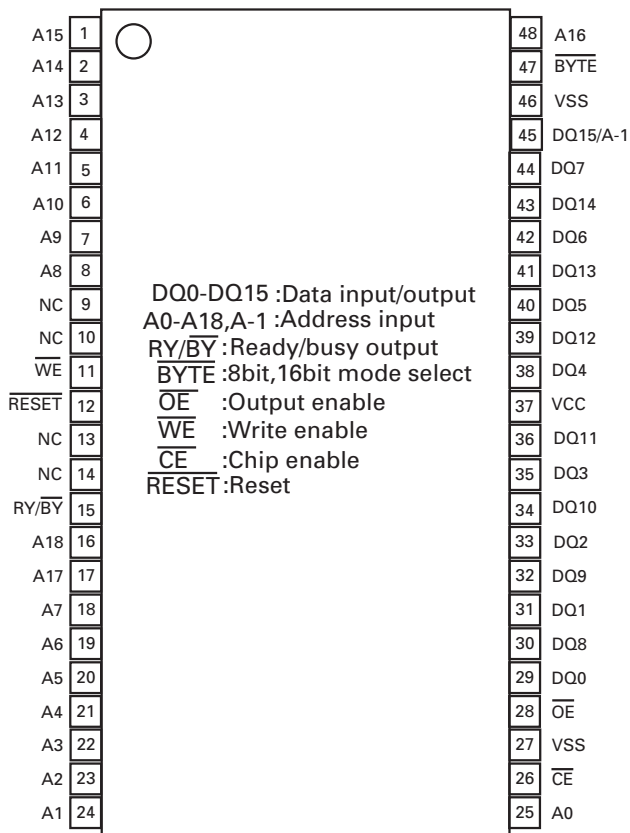
*TC74LCX08FT



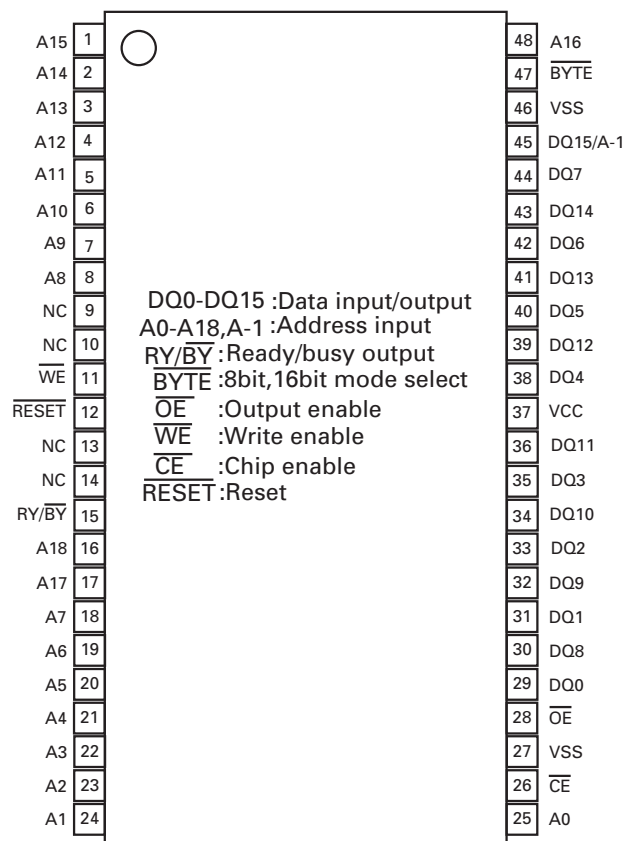
*TC7SH00FU



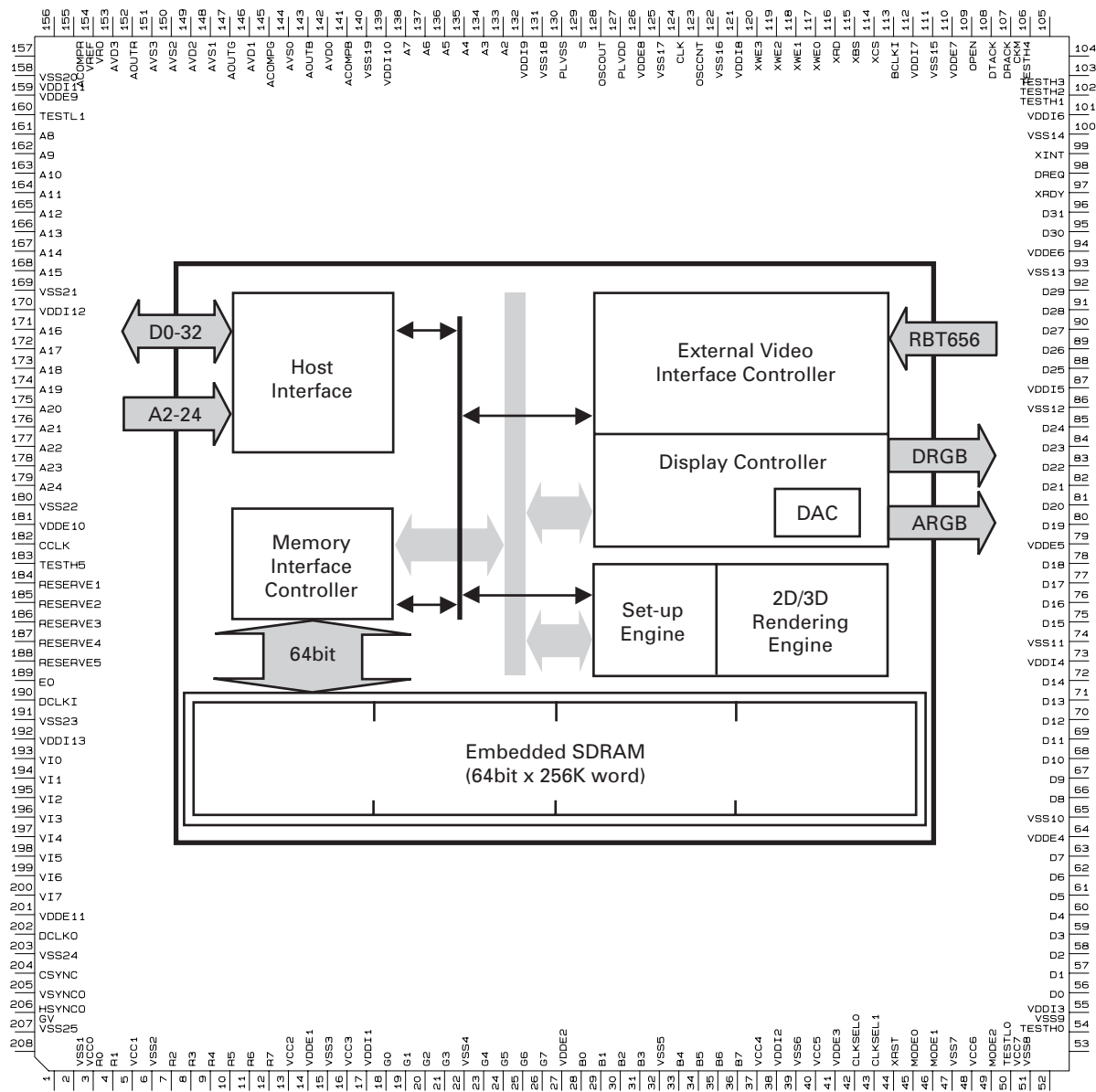
*PD6349C



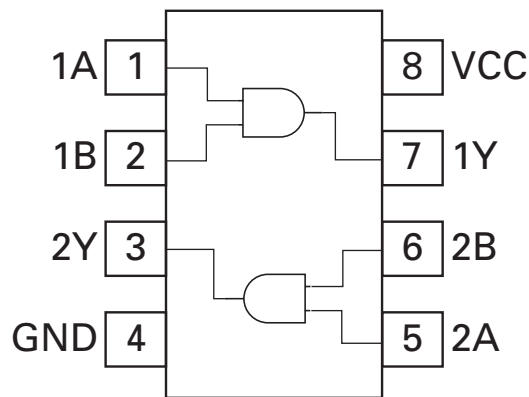
*PD6350C



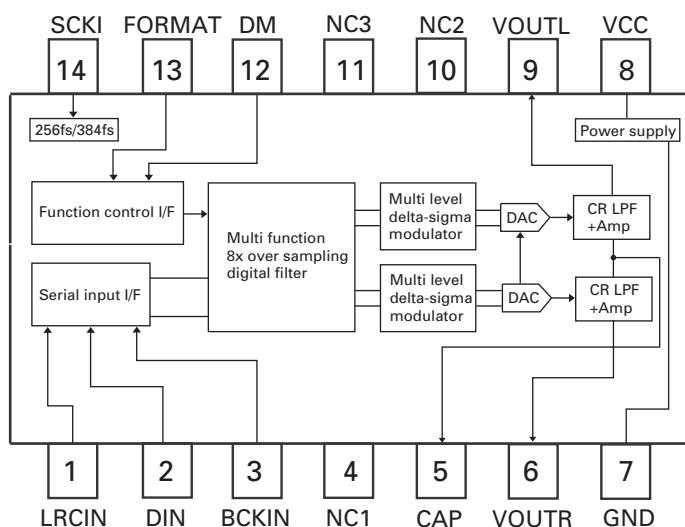
*MB86291PFVS-G-DL



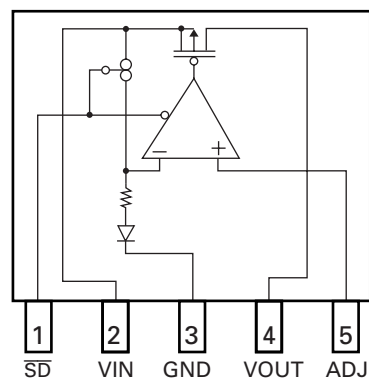
*TC7WH08FU



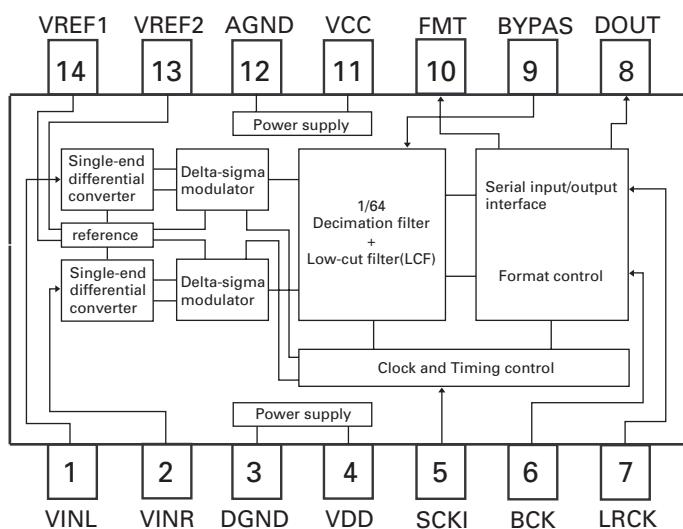
*PCM1725U



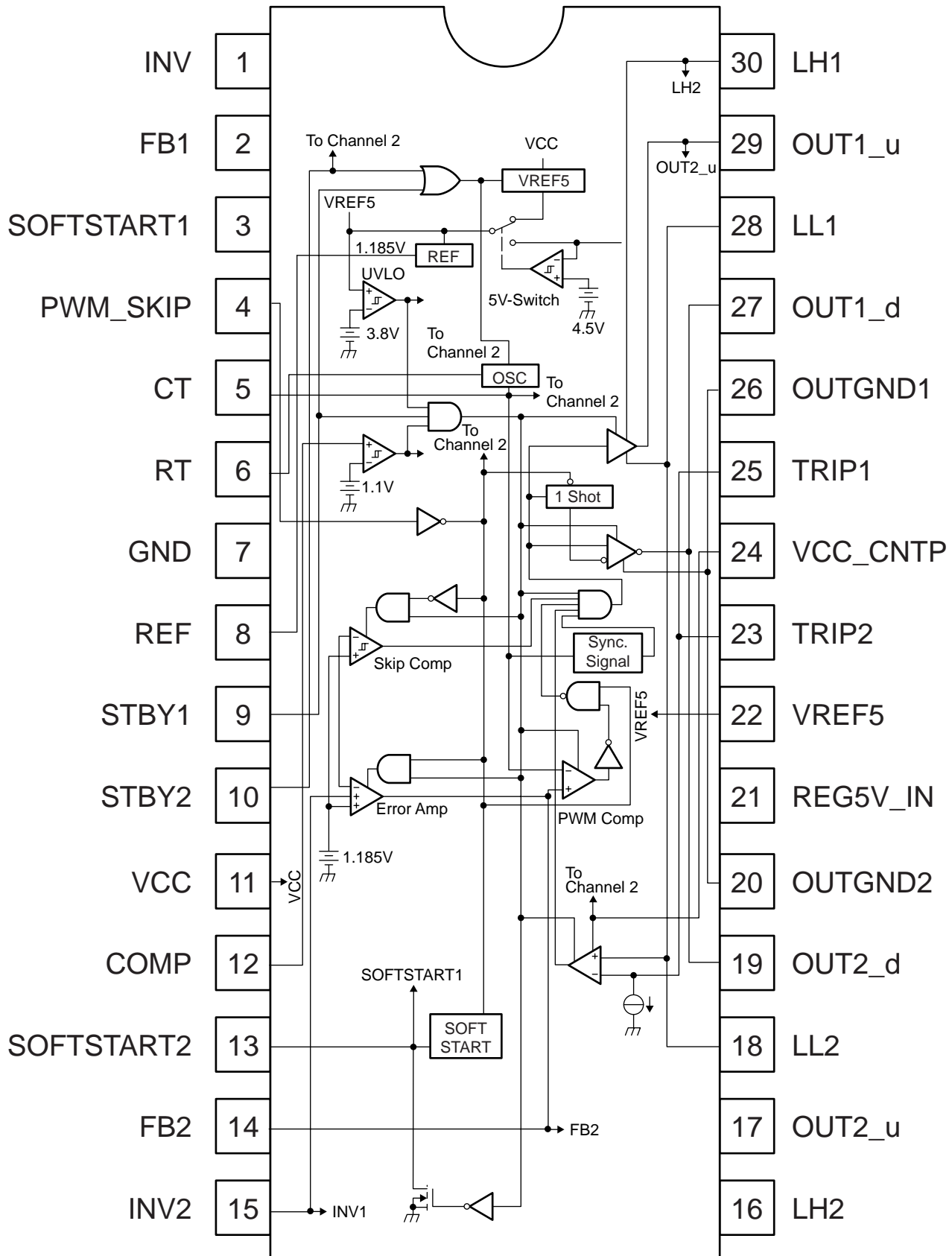
*LP3965ES-ADJ



*PCM1801U



*TPS5102IDBT

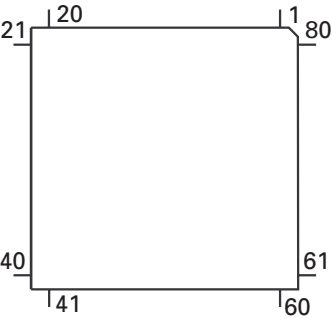


● Pin Functions (PE5228A)

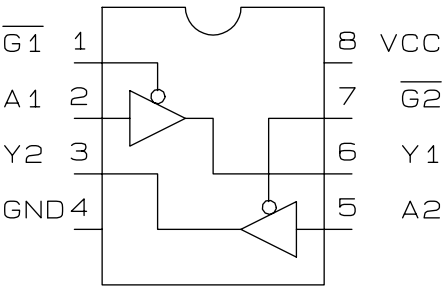
Pin No.	Pin Name	I/O	Format	Function and Operation
1-3	NC			Not used
4	AVSS			A/D GND
5	VOL	O		Guide voice volume output
6	NC			Not used
7	AVREF1			(D/A converter reference voltage)
8	FROMCC	I		Data input from CC UNIT (UART)
9	TOCC	O	C	Data output to CC UNIT (UART)
10	NC			Not used
11	FORMEX	I		Data input from EXT (UART)
12	TOEX	O	C	Data output to EXT (UART)
13-15	NC			Not used
16	TSI/FSI	I		Test program data input
17	TSO/FSO	O	C	Test program data output
18	TSCKFCK	I		Test program clock input
19,20	NC			Not used
21	ROMDT	O	C	ROM collection data output
22	ROMCLK	O	C	ROM collection clock output
23	ROMCS	O	C	ROM collection chip select output
24	ACCPW	O	C	ACC power supply output
25	GPSON	O	C	GPS power supply ON output
26	DRAMPW	O	C	DRAM power supply control output
27	RGBMUTE	O	C	RGB audio mute output
28	RCAMUTE	O	C	RCA audio mute output
29	RSTOUT	O	C	Reset output
30	DVDON	O	C	DVD power supply ON output
31	CCON	O	C	Car computer power supply ON output
32	IRQPOW	O	C	Emergency stand-by request output (BSENS)
33	VSS1			GND
34,35	NC			Not used
36-38	SIMUKE0-2	I		Model detect input 0-2
39,40	SEDAI0,1	I		Generation detect input 0,1
41	TVON	O	C	TV communication enable output
42	ALARMOUT	O	C	Detach warning LED output
43	MAYSNS	I		MAYDAY UNIT detect input (H : No unit)
44-47	CCPORT0-3	O	C	Control port output from CC UNIT 0-3 (Stand-by time = L)
48,49	INPORT0,1	I		Input notice port input to CC UNIT 0,1 (Stand-by time = L)
50	TESTMODE	I		Navigation test mode detect input (H : Test mode)
51	TESTIN	I		Chip test / Enable input (L : Chip test)
52	NC			Not used
53	CPUWDT	I		WDT operation input from CC UNIT
54	NC			Not used
55	M/S	I		Master / Slave input (H : Alone)
56,57	NC			Not used
58	TIMEOUT	I		(L : No time-out)
59	NC			Not used
60	RESET	I		Reset input
61	REMIN	I		Remote control data input
62	BSENS	I		Back Up sense input
63	ASENS	I		ACC sense input
64	HELPIN	I		HELP system SW input
65	DISC	I		DISC detect input
66	NC			Not used
67	VSS0			GND
68	VDD1			Power supply
69	X2			Crystal oscillating element connection pin (Main system)
70	X1			Crystal oscillating element connection pin (Main system)

Pin No.	Pin Name	I/O	Format	Function and Operation
71	TEST/VPP			Connect to GND
72	XT2			Crystal oscillating element connection pin (Sub system)
73	XT1			Crystal oscillating element connection pin (Sub system)
74	VDD0			Power supply
75	AVDD			(A/D converter power supply)
76-80	NC			Not used

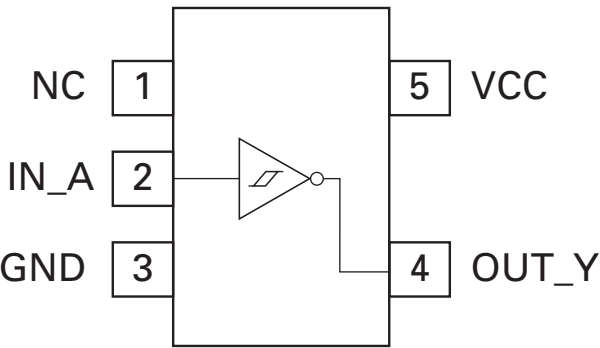
*PE5228A



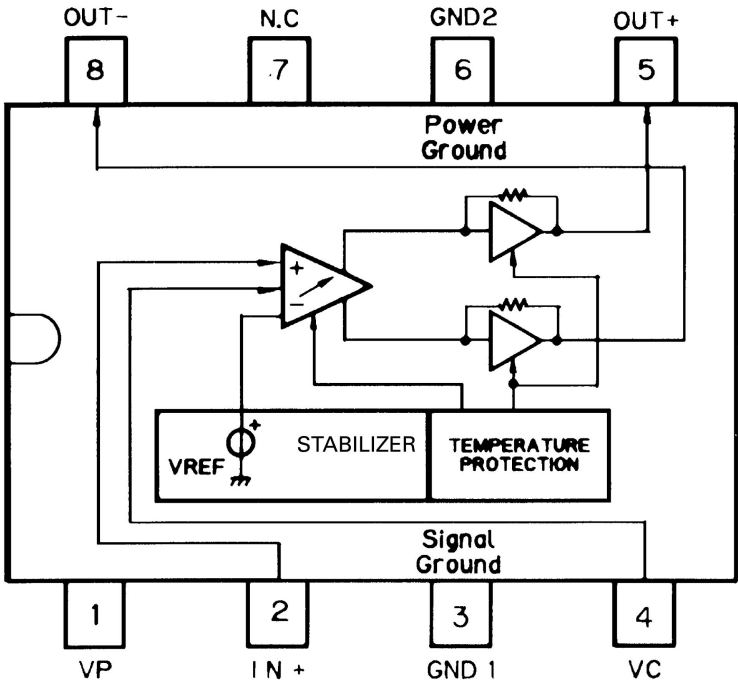
*TC7W126FU



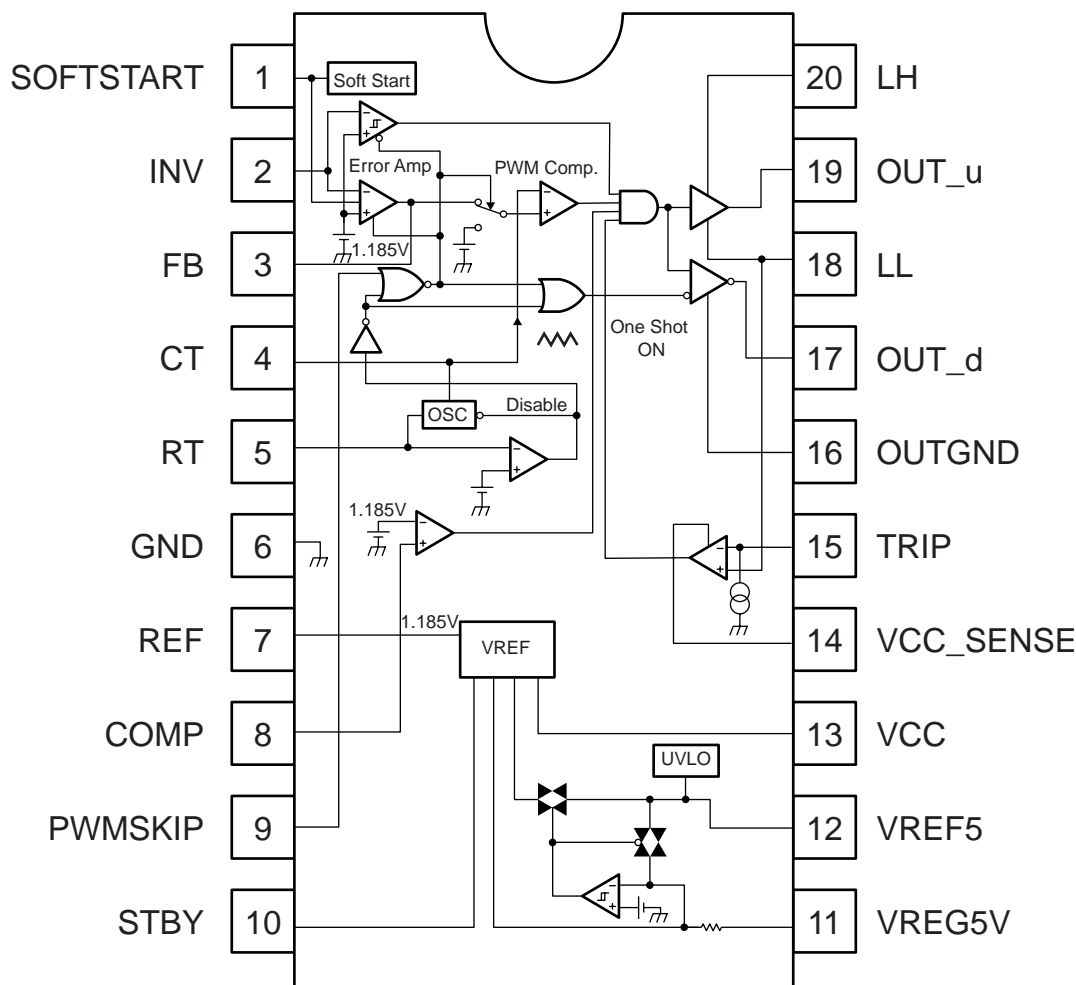
*TC7S14FU



TDA7052A



*TPS5103IDB

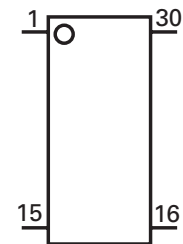


● Pin Functions(LC72720YVS)

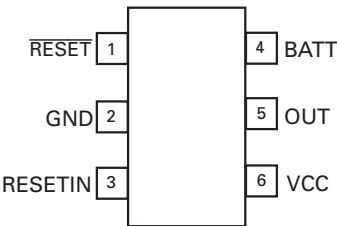
Pin No.	Pin Name	I/O	Function and Operation
1	VREF	O	Reference voltage output
2	MPXIN	I	Base band (multiplexed) signal input
3	Vdda		Analog system power supply (+5V)
4	NC		Not used
5	Vssa		Analog system GND
6	FLOUT	O	Sub carrier output (filter output)
7	CIN	I	Sub carrier input (comparator input)
8	NC		Not used
9	T1	I	Test input (connect to GND)
10	T2	I	Test input (stand-by control)
11	T3	O	RDS clock output
12	NC		Not used
13	T4	O	RDS data output
14	T5	O	Soft-decision control data output
15	XOUT	O	Crystal oscillator output
16	XIN	I	Crystal oscillator input
17	Vddd		Digital system power supply (+5V)
18	Vssd		Digital system GND
19	NC		Not used

Pin No.	Pin Name	I/O	Function and Operation
20	T6	O	Error status, regenerated carrier and error block count outputs
21	T7	O	Error correction status, SK detection and error block count outputs
22	SYNC	O	Block synchronization detection output
23	NC		Not used
24	RDS-ID	O	RDS detection output
25	DO	O	Data output
26	CL	I	Clock input
27	NC		Not used
28	DI	I	Data input
29	CE	I	Chip enable input
30	SYR	I	Synchronization and RAM address reset input

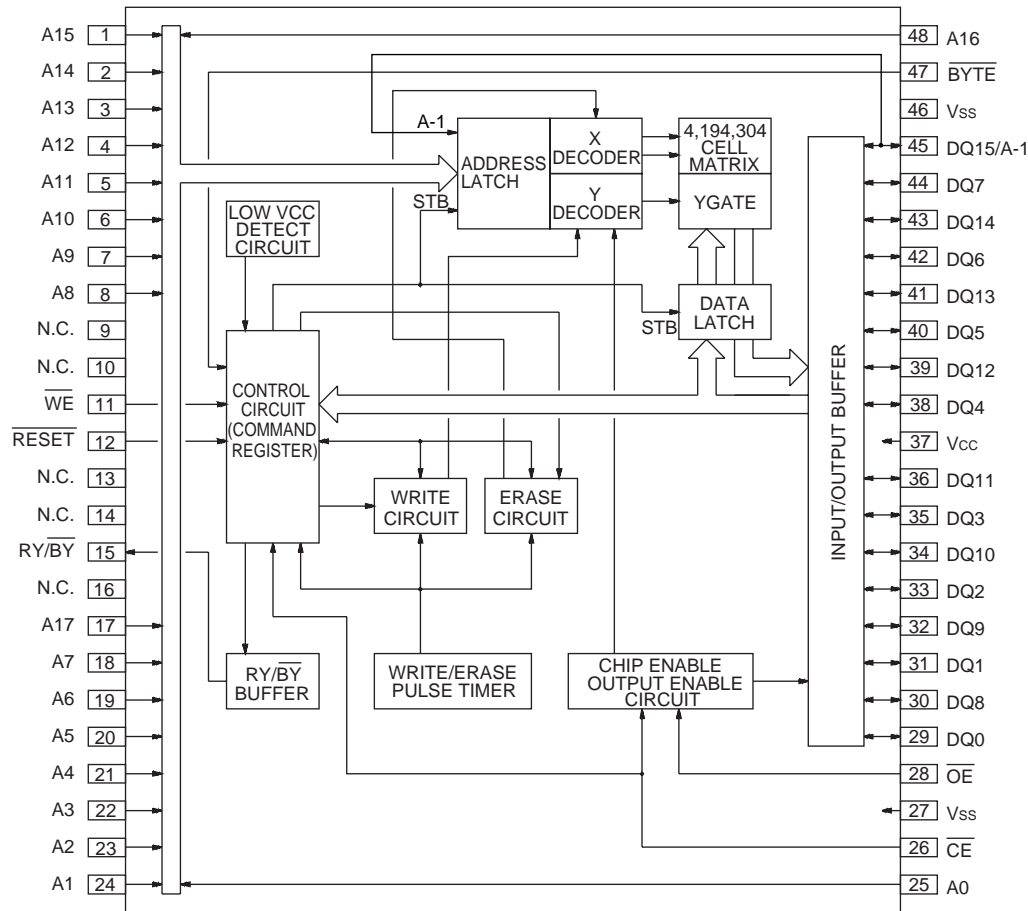
*LC72720YVS



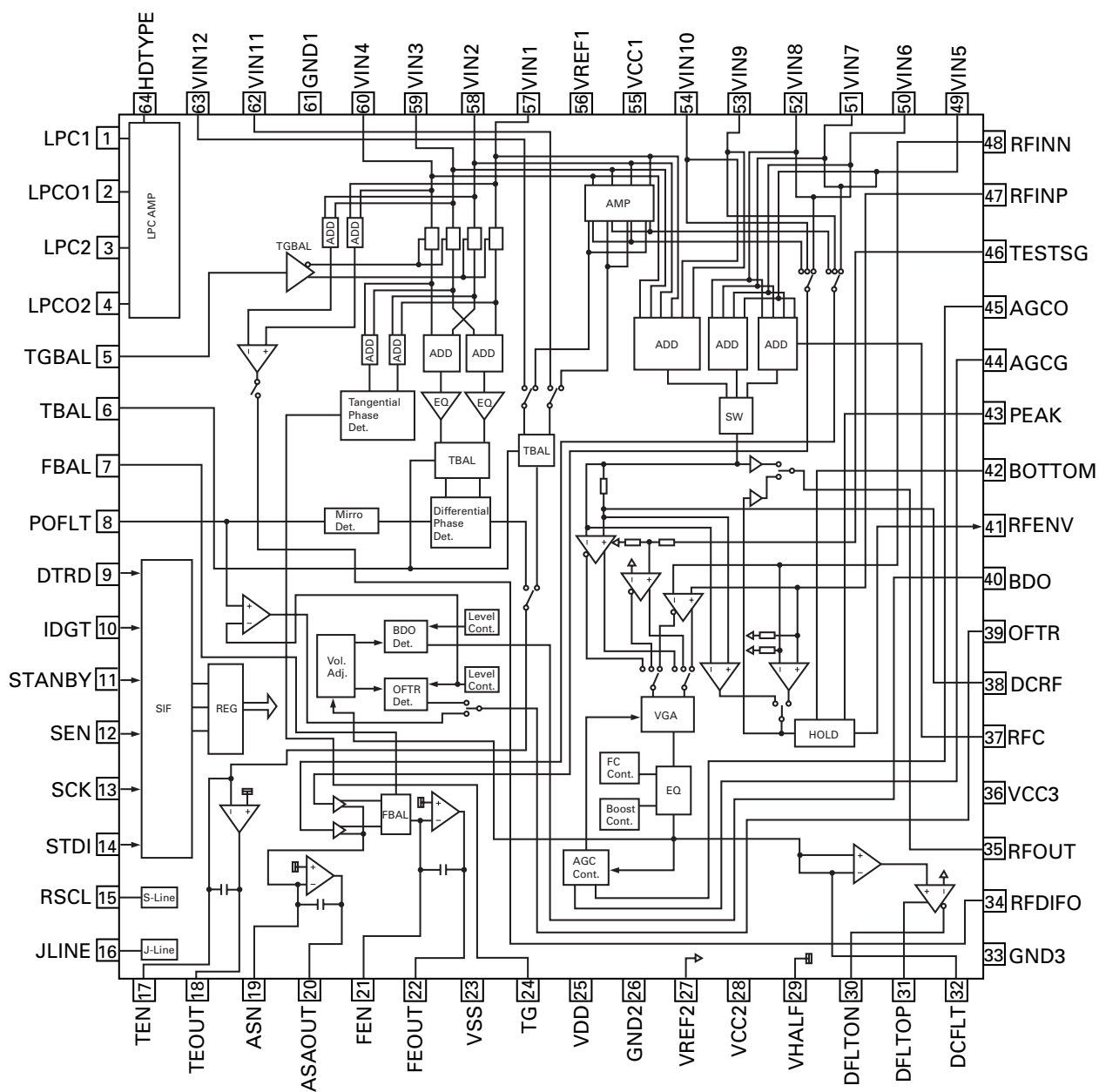
*MAX6364PUT29



*PD6361B



*AN8702FH

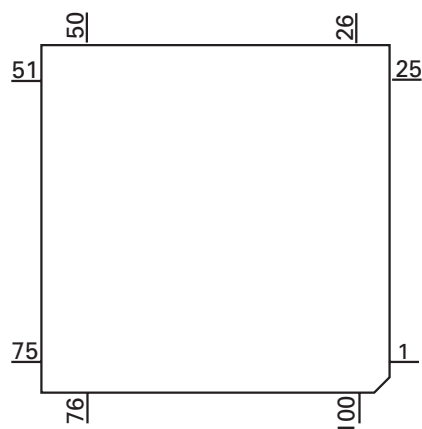


● Pin Functions(MN677061ZYUB)

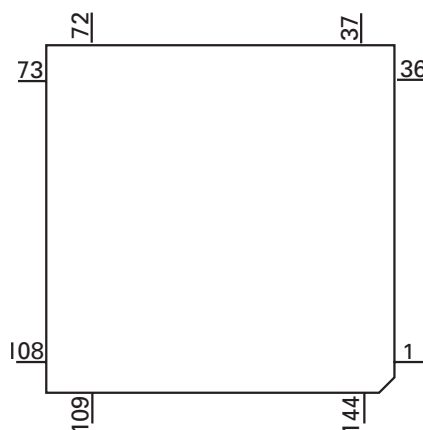
Pin No.	Pin Name	I/O	Function and Operation
1	AS	I	Full adder signal input
2	TE	I	Phase-contrast/Three beam tracking error input
3	FE	I	Focus error input
4	AVDD		Analog power supply (3.3V)
5	FODRV	O	Focus driver output
6	TRDRV	O	Tracking driver output
7	AVSS1		Analog GND
8	ARF	I	Equivalent RF+ input
9	$\overline{\text{ARF}}$	I	Equivalent RF- input
10,11	IREF1,2	I	DBAL reference current input 1,2
12,13	DSL1,2	I/O	DSL capacitor input/output 1,2
14	AVDD2		Analog power supply (3.3V)
15	VHALF		Reference voltage (1.65±0.1V)
16,17	NC		Not used
18	VREFH		Reference voltage (2.2±0.1V)
19	RVI	I/O	VERFH reference current resistor input/output
20	AVSS2		Analog GND
21,22	PLFLT1,2	O	PLL capacitor output 1,2
23	JITOUT	I/O	Jitter signal monitor input/output
24	N.C.1	I	Open
25	N.C.2	I/O	Pull up
26	NC		Not used
27	AVDD3		Analog power supply (3.3V)
28	N.C.3	I	Pull up
29	N.C.4		Not used
30	AVSS3		Analog GND
31	N.C.5		Pull up
32	N.C.6		Not used
33	N.C.7		Open
34	TRCRS	I	Track cross production signal input
35	VCOF	I/O	JFVCO control voltage input/output
36	DBALO	O	DSL balance adjustment output
37	JLIN	O	J-line set output
38	AVDD4		Analog power supply (3.3V)
39	LOUT	O	Analog audio left output
40	ROUT	O	Analog audio right output
41	AVSS4	I	Analog GND
42	GBAL	O	Tangential balance adjustment output
43	TBAL	O	Tracking balance adjustment output
44	FBAL	O	Focus balance adjustment output
45	VSS331		I/O GND
46	VDD331		I/O power supply (3.3V)
47	OFTR	I	Off track signal input
48	SYSCLK	I	System clock input
49	BDO	I	RF dropout signal input
50	TSTSG	O	Calibration signal output
51	TRSDRV	O	Traverse driver output
52	SPDRV	O	Spindle driver output
53	FG	I	FG signal input
54	N.C.8		Not used
55	CRGDRV	O	Carriage driver output
56	N.C.10		Not used
57	VSS251		GND
58	VDD251		Power supply
59	DTRD	I	Data read control signal output
60	LDGT	I	GND
61	LRCK	O	LR channel data strobe output
62	SBBCLK	O	CD sub code synchronism signal output

Pin No.	Pin Name	I/O	Function and Operation
63	PLLOK	I	PLL drag OK signal input
64	IDHOLD		GND
65	DACLRCK	I	1bit DAC - LR channel data strobe input
66	DACDATA	I	CD 1bit DAC channel data input
67	TRON	O	Tracking ON output
68	DACCLK	O	1bit DAC channel data shift clock input
69	IPFLG	O	CIRG error flag output
70	SUBC	O	CD sub code output
71	CLDCK	O	CD sub code data frame clock output
72	MINTEST	I	GND
73	TEST	I	GND
74	VSS332		I/O GND
75	VDD332		I/O power supply (3.3V)
76	CHCK40	O	SRDATA clock output
77-80	DAT3-0	O	SRDATA output 3-0
81	VSS333		I/O GND
82	VDD333		I/O power supply (3.3V)
83	TX	O	Digital audio interface data output
84	XRESET	I	Reset input
85	ENS	I	Servo DSC serial I/F chip select input
86	ENC	I	CIRC serial I/F chip select input
87	CPUIRQ	O	Interrupt request output to system computer
88	CPUCLK	I	System computer serial I/F clock input
89	CPUDTIN	I	System computer serial I/F data input
90	CPUDTOUT	O	System computer serial I/F data output
91,92	MONA,B	O	Monitor terminal output A,B
93	CDPLLOK	O	CD PLL drag OK signal output
94	N.C.12		Not used
95	VSS252		GND
96	VDD252		Power supply
97,98	N.C.		Pull up
99	TG	I	Tangential phase-contrast input
100	REFNV	I	RF envelop input

*MN677061ZYUB



*MNZS25BDAUB

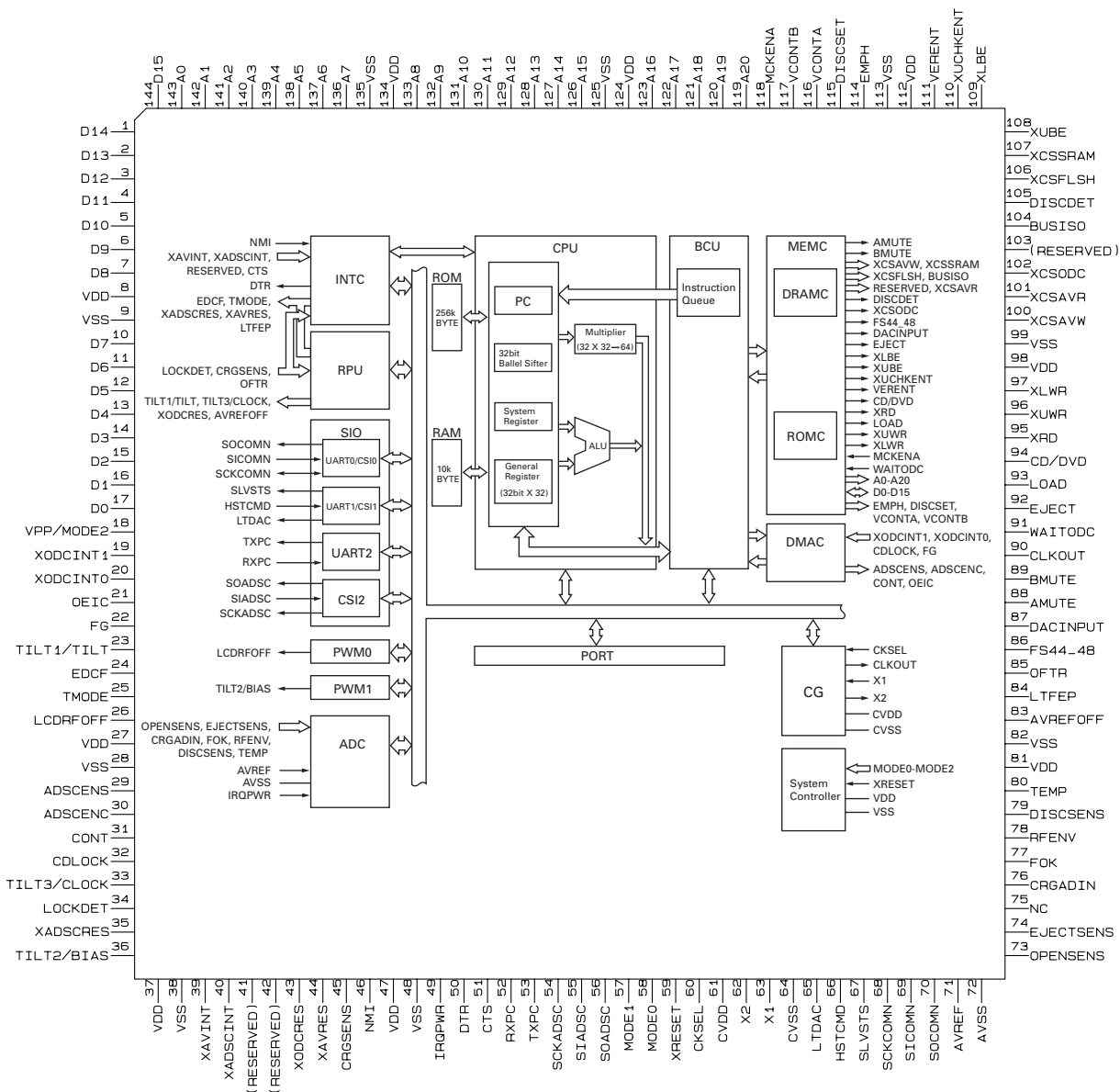


● Pin Functions(MNZS25BDAUB)

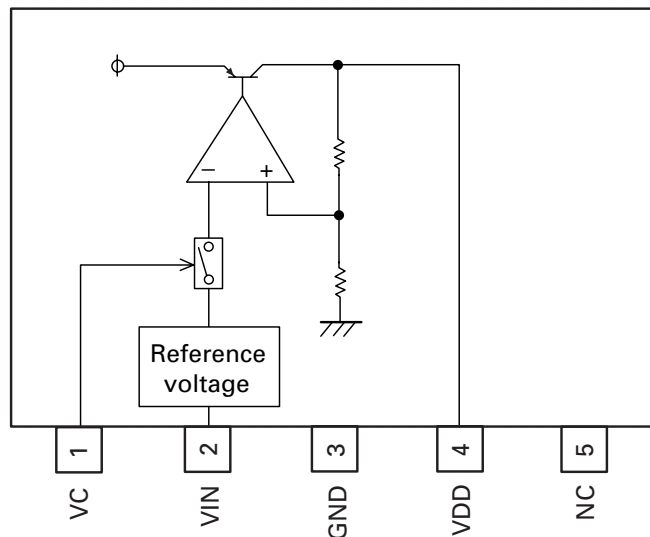
Pin No.	Pin Name	I/O	Function and Operation
1	HDD15	I/O	ATAPI HOST data input/output 15
2	HDD0	I/O	ATAPI HOST data input/output 0
3	HDD14	I/O	ATAPI HOST data input/output 14
4	VDD31		I/O power supply (3.3V)
5	HDD1	I/O	ATAPI HOST data input/output 1
6	HDD13	I/O	ATAPI HOST data input/output 13
7	HDD2	I/O	ATAPI HOST data input/output 2
8	VSS1		GND
9	HDD12	I/O	ATAPI HOST data input/output 12
10	VDD21		Digital power supply (2.7V)
11	HDD3	I/O	ATAPI HOST data input/output 3
12	HDD11	I/O	ATAPI HOST data input/output 11
13	HDD4	I/O	ATAPI HOST data input/output 4
14	HDD10	I/O	ATAPI HOST data input/output 10
15	VDD32		I/O power supply (3.3V)
16	HDD5	I/O	ATAPI HOST data input/output 5
17	HDD9	I/O	ATAPI HOST data input/output 9
18	VSS2		GND
19	HDD6	I/O	ATAPI HOST data input/output 6
20	HDD8	I/O	ATAPI HOST data input/output 8
21	HDD7	I/O	ATAPI HOST data input/output 7
22	VDDH		ATAPI reference power supply (5.0V)
23	RESET		Reset input
24	MASTER	I/O	ATAPI master/slave select input/output
25	INT0	O	System computer interrupt output 0
26	INT1	O	System computer interrupt output 1
27	WAITODC	O	System computer bus wait control output
28	MRST	O	System computer reset output
29	DASPST	I	DASP initialize value input
30	VDD33		I/O power supply (3.3V)
31	NC		Not used
32	P2	O	PORT output
33	UATASEL	I	Internal clock select input
34	VSS3		GND
35	PVSSDRAM1		GND
36	PVDDDRAM1		Digital power supply (2.7V)
37,38	CPUADR17,16	I	System computer address input 17,16
39	PVSSDRAM2		GND
40-43	CPUADR15-12	I	System computer address input 15-12
44	PVDDDRAM2		Digital power supply (2.7V)
45-55	CPUADR11-1	I	System computer address input 11-1
56	VSS4		GND
57	CPUADR0	I	System computer address input 0
58	CS	I	System computer chip select input
59	WR	I	System computer write signal input
60	RD	I	System computer read signal input
61	VDD34		I/O power supply (3.3V)
62,63	CPUDT7,6	I/O	System computer data input/output 7,6
64,65	PTESTDRAM0,1		GND
66	VDD22		Digital power supply (2.7V)
67	VSS5		GND
68-70	CPUDT5-3	I/O	System computer data input/output 5-3
71	VSS6		GND
72-74	CPUDT2-0	I/O	System computer data input/output 2-0
75	CLKOUT1	O	System computer clock output 1
76	VDD35		I/O power supply (3.3V)
77	NC		Not used
78	DTRD	O	CAPA read gate output
79	NC		Not used

Pin No.	Pin Name	I/O	Function and Operation
80	BDO	I	RF dropout signal input
81	LRCK	I	LR identifier signal input
82	SBBCLK	I	CD sub code block clock input
83	VSS7		GND
84	MMOD		GND
85	RST	I	System reset input
86	VDD23		Digital power supply (2.7V)
87	CLKOUT2	O	System computer clock output 2
88	PLLOK	O	Frame mark detect signal output
89	NC		Not used
90	DACLCK	O	LR identifier signal output
91	DACDATA	O	Serial output
92	TRON	I	Tracking ON input
93,94	NC		Not used
95	DACCLK	I	1bit DAC Serial output clock input
96	IPFLG	I	interpolation flag input
97	TX	I	TX input
98	LRCK	I	VSS
99	VSS8		GND
100	OSC1	I	Oscillator pin input
101	OSCO1	O	Oscillator pin output
102	VDD36		I/O power supply (3.3V)
103	PVSS		GND
104	PVDD		I/O power supply (3.3V)
105	P1		VDD3
106	P0		VDD3
107	VSS9		GND
108	NC		Not used
109	SUBC	I	Sub code serial input
110	XCLDCK	I	Sub code Frame clock input
111	CHK4	I	Read clock input to DAT3-0
112-115	DAT3-0	I	Read data input from DISC 3-0
116	VDD37		I/O power supply (3.3V)
117	SCLOCK	I/O	Pull up
118	SDATA	I/O	Pull up
119-122	MONI3-0	O	Internal signal monitor output 3-0
123	VSS10		GND
124	EJECT	I	Eject detect input
125	VDD24		Digital power supply (2.7V)
126	TRYCL	I	Tray close detect input
127	DASP	I/O	ATAPI drive active/slave connect input/output
128	CS3FX	I	ATAPI HOST chip select input
129	CS1FX	I	ATAPI HOST chip select input
130	VDD38		I/O power supply (3.3V)
131	DA2	I/O	ATAPI HOST address input/output 2
132	DA0	I/O	ATAPI HOST address input/output 0
133	PDIAG	I/O	ATAPI slave/master diagnosis input/output
134	VSS11		GND
135	DA1	I/O	ATAPI HOST address input/output 1
136	IOCS16	O	ATAPI HOST data bus width select output
137	INTRQ	O	ATAPI HOST interrupt request output
138	VDD39		I/O power supply (3.3V)
139	DMACK	I	ATAPI HOST DMA response input
140	IORDY	O	ATAPI HOST ready output
141	IORD	I/O	ATAPI HOST data read input/output
142	VSS12		GND
143	IOWR	I/O	ATAPI HOST data write input/output
144	DMARQ	O	ATAPI HOST DMA request output

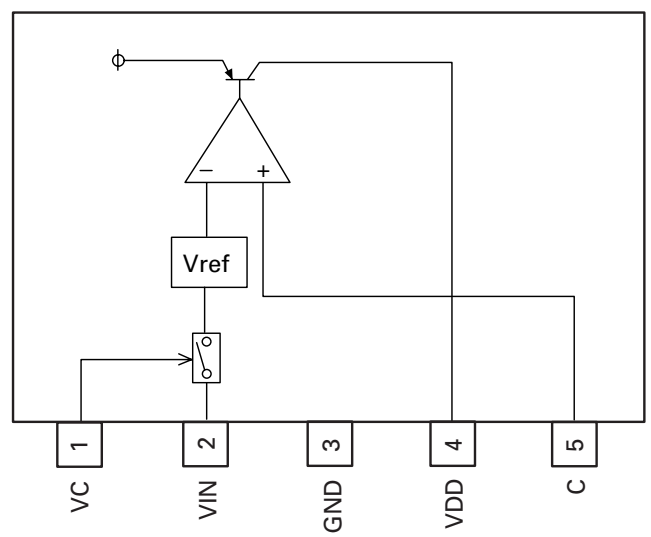
*PE5277A



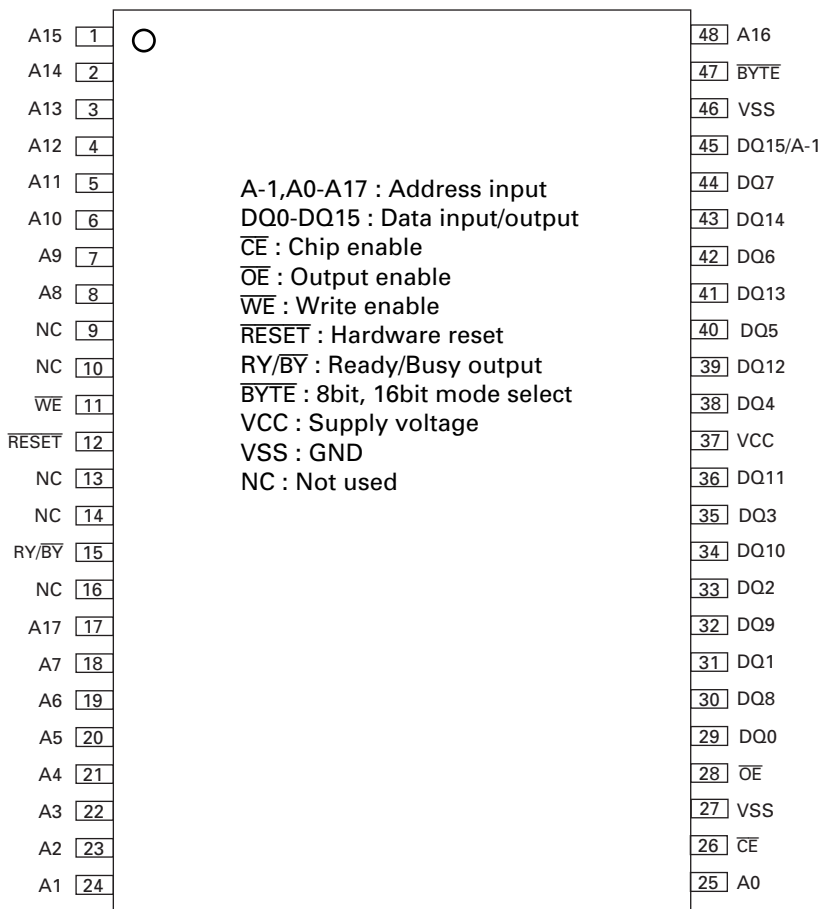
BA033SFP



BA00BC0WFP

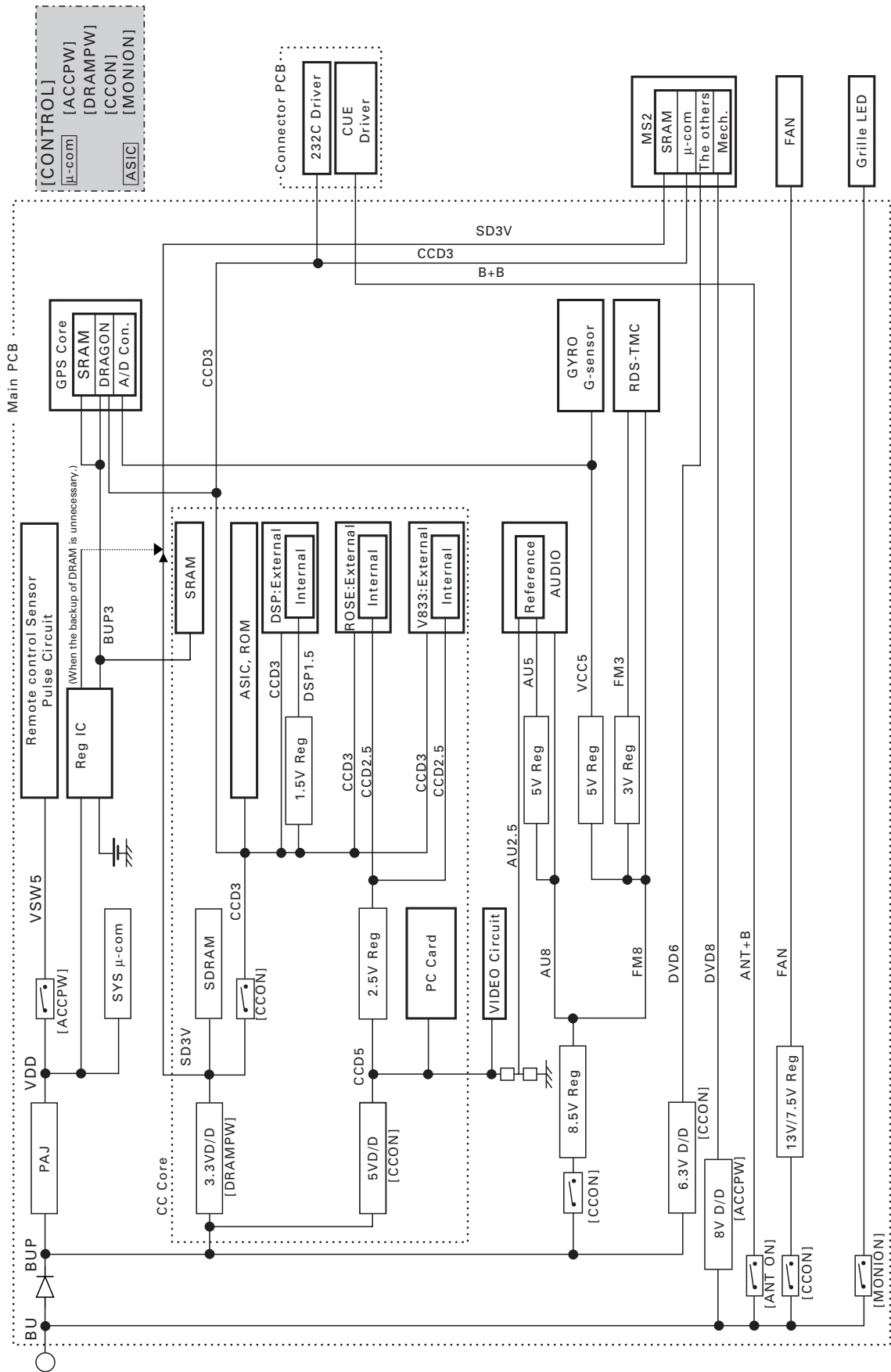


*PD6378A

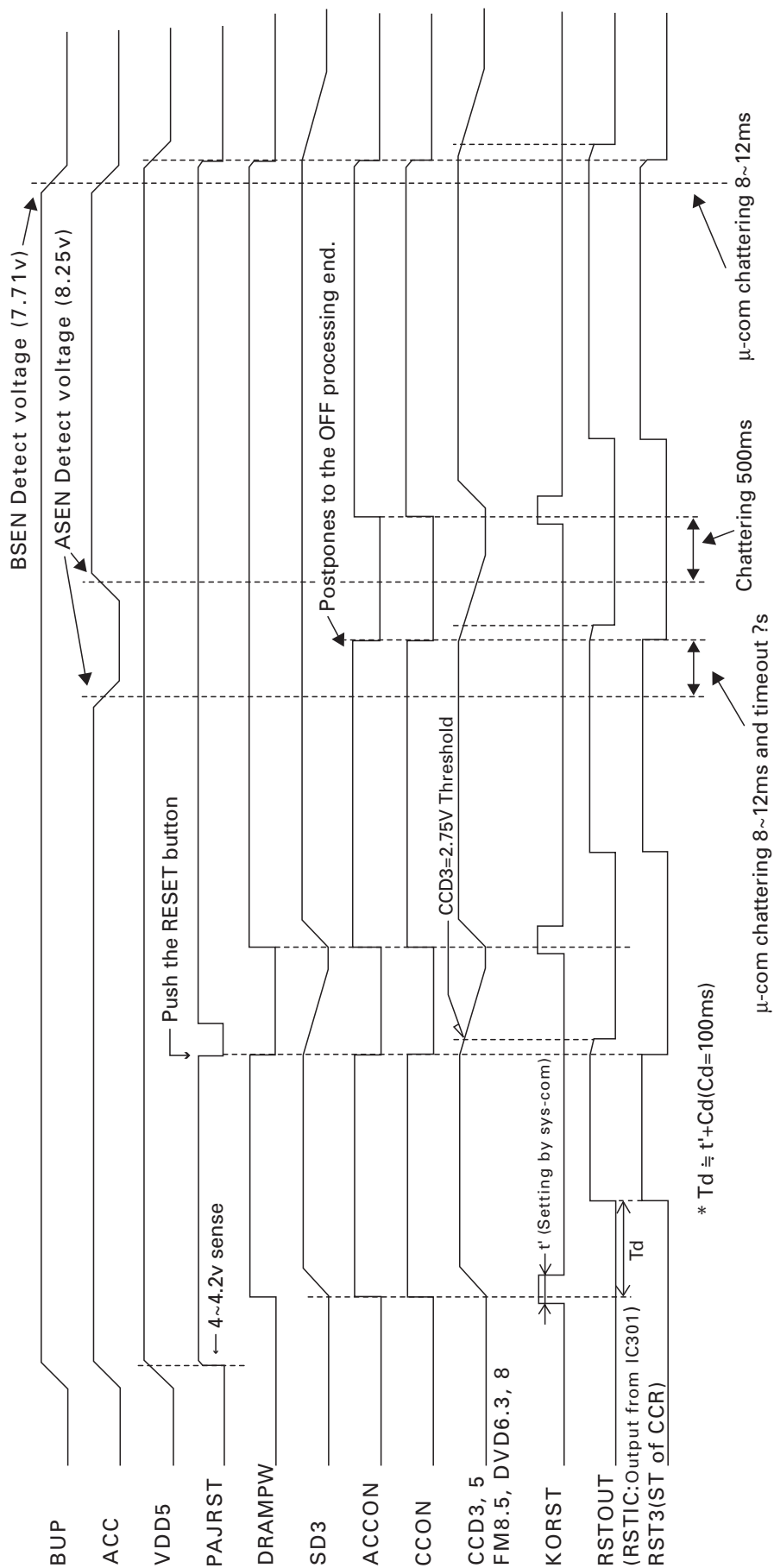


7.3 EXPLANATION

7.3.1 CIRCUIT DESCRIPTION



7.3.2 OPERATIONAL FLOW CHART

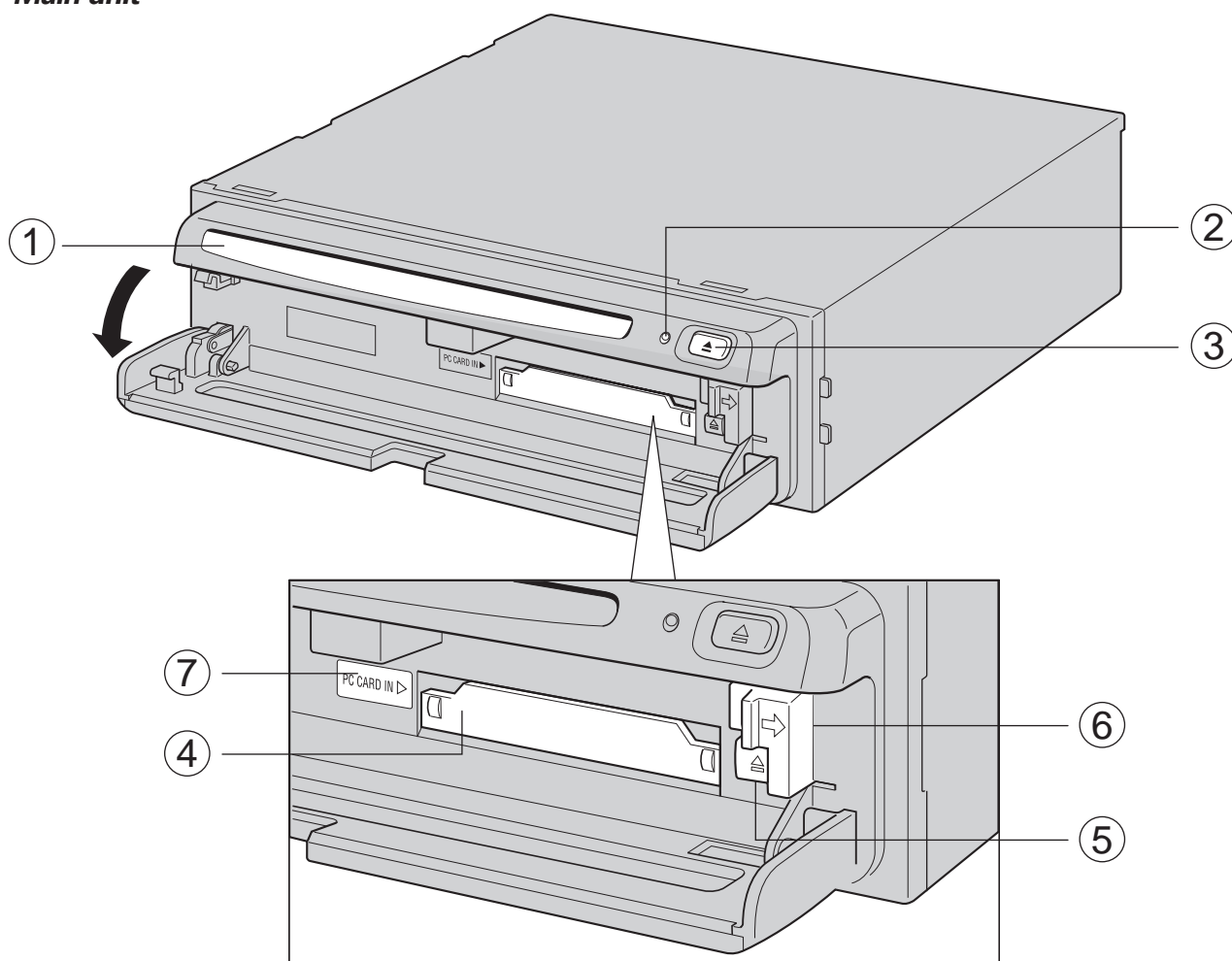


8. OPERATIONS AND SPECIFICATIONS

8.1 OPERATIONS

Key Finder

Main unit



(1) Disc loading slot

(2) Reset button

If the system goes wrong, reset it by pressing this recessed button with a ballpoint pen or similar pointed object.

(3) Disc ejection button

(4) PC card slot

(5) PC card ejection button

Remove the PC card by pressing this button.

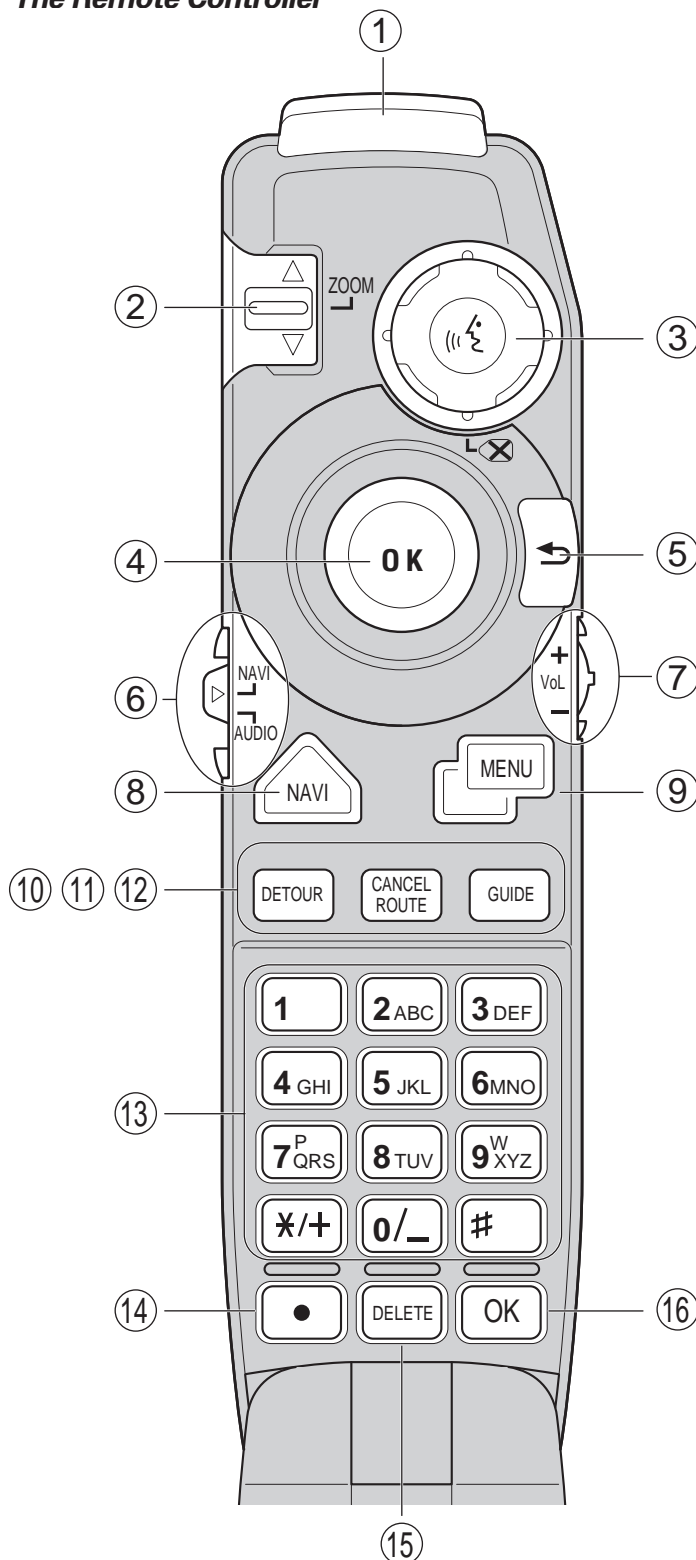
(6) PC card lock lever

This lever is used when you remove the PC card.

(7) PC card lock lamp

The red light goes on when the PC card is inserted and a proper connection is made.

The Remote Controller



(1) Transmitter

Signals of the Remote Controller are transmitted from here.

(2) Scale controller

You use the scale controller to enlarge or reduce the displayed map. When you move the scale controller downwards, the scale of the displayed map is enlarged and a more detailed map is displayed. Conversely, moving it upwards reduces the displayed map, and a wider area is displayed. Also, when a list is longer than one screen, this controller is used for indicating the next screen or previous screen.

(3) TALK button

You use the TALK button to start voice recognition, allowing you to command the Navigation System by speech. When a voice command is given, you can cycle through possible matches by clicking down this button.

(4) Joystick/OK button

Use the joystick to select items in the display and to scroll the map. The joystick is also the OK button; simply press it to select a location on the map or an option displayed on the screen.



Used as the joystick :

Directions of movements indicated by arrows are possible.



Used as the OK button :

Press straight down.

(5) BACK button

While using a menu, pressing this button cancels the present operation and returns you to the previously displayed menu or list.

(6) Mode switch

Use this switch to select whether the Remote controls the Navigation System or Pioneer's Head Unit. When switching the operation mode, functions of the VOL dial will change.

(7) VOL dial

When you turn the dial downwards, the volume decreases. Turning it upwards increases the volume.

- When the selection switch is set to "NAVI", the volume of the voice guidance for navigation is adjusted.
- When the selection switch is set to "AUDIO", the volume for Pioneer's Head Unit is adjusted. If the dial is pressed, the volume is reduced to around 1/10th of the volume (ATT function). When pressed again, the volume returns to its previous level.

(8) NAVI button

You press the NAVI button to view the map or return to guidance. Also, when the map is scrolled, pressing this button returns to the display of the map of your surroundings.

(9) MENU button

Pressing the MENU button displays a menu of options.

(10) DETOUR button

Press this button to restart route calculation, such as calculating a detour. If this button is pressed for more than two seconds, you can see the information (passing roads and driving distance, and so on) of the route down which you are currently being guided.

(11) CANCEL ROUTE button

Press this button to cancel the route guidance. When pressed for more than two seconds, the next via point is recognised as already being passed, and a new route calculation starts.

(12) GUIDE button

Press this button if you did not hear the voice guidance properly. If this button is pressed for more than two seconds, you can listen to traffic information (where available.).

(13) Numeric keypad

You use this pad for entering characters or numbers.

(14)

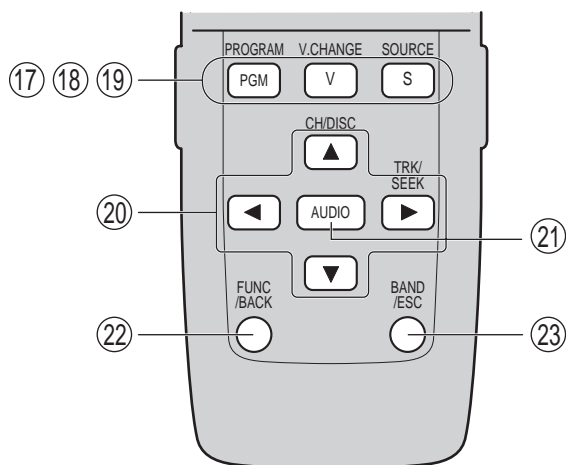
Not used.

(15) DELETE button

Press to delete the character you just entered. If you press this button for more than two seconds, all the characters entered will be deleted.

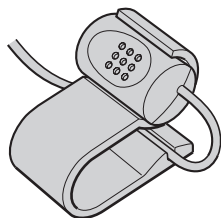
(16) OK button for numeric keypad

This works in the same way as "OK" on the text palette.



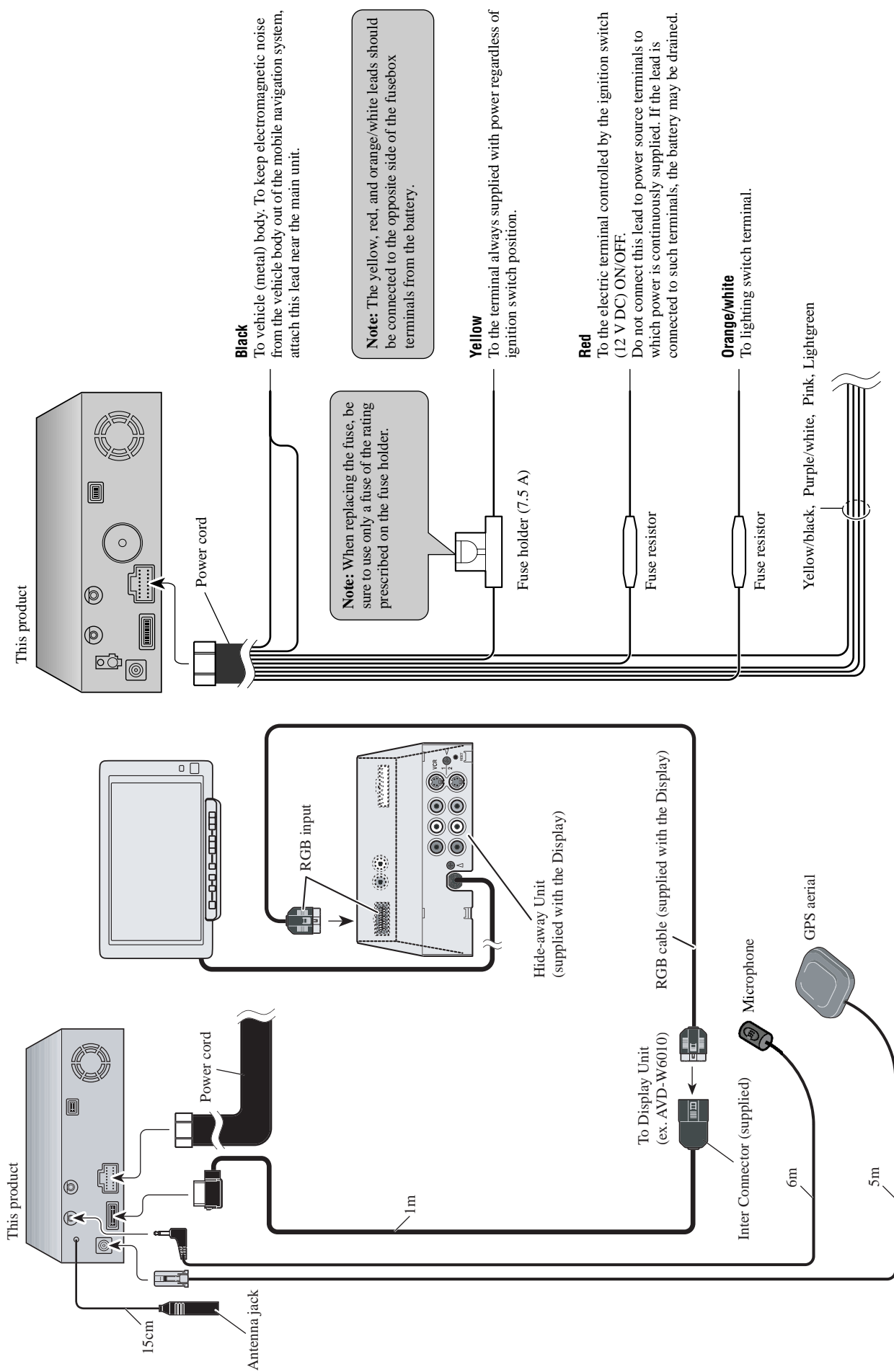
- (17) **PROGRAM** button
(for audio operation)
- (18) **V.CHANGE** button
(for audio operation)
- (19) **SOURCE** button (for audio operation)
- (20) **Cross Key / ▲, ▼, ◀, ▶** button
(for audio operation)
- (21) **AUDIO** button (for audio operation)
- (22) **FUNC/BACK** button
(for audio operation)
- (23) **BAND/ESC** button
(for audio operation)

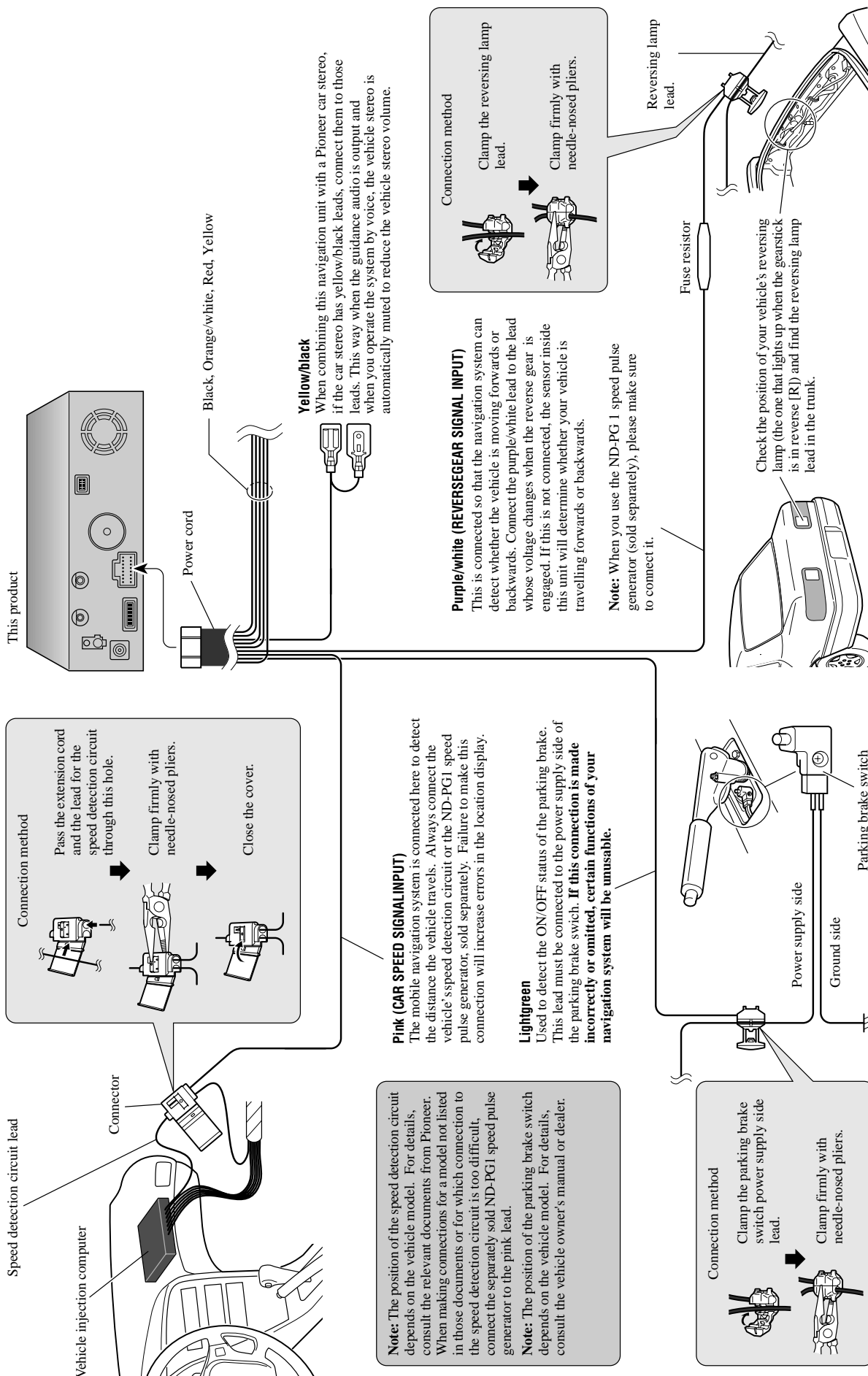
Microphone



(1) Microphone

After pressing the TALK button to start voice operation, this microphone hears your commands.





8.2 SPECIFICATIONS

Specifications

Main unit

(GPS receiver)

System	: L1, C/Acode GPS SPS (Standard Positioning Service)
Reception system	: 8-channel multi-channel reception system
Reception frequency	: 1,575.42 MHz
Sensitivity	: -130 dbm
Position update frequency	: Approx. once per second

(Common)

Max. output impedance	: 1Vp-p, 75
Maximum current consumption	: 2.0 A
Power source	: DC 14.4V (10,8 - 15.1V allowed)
Ground type	: Negative type
Buckup current	: 4mA or less

GPS aerial

Aerial	: Micro strip flat aerial/ right-handed helical polarization
Aerial cable	: 5.0 m

Dimensions

Main unit	: 200(W) 52(H) 209(D) mm
GPS aerial	: 46(W) 46(H) 13(D) mm
Remote controller	: 38(W) 145(H) 30(D) mm

Weight

Main unit	: 2.1 kg
GPS aerial	: 130g
Remote controller	: 80g (including battery)

Note:

- The specifications and design are subject to change without prior notice. The product purchased may differ in detail from illustrations in this manual.